MINISTRY OF EDUCATION AND TECHNICAL EDUCATION
وزارة التربية والتعليم والتعليم الفنى

KINDERGARTEN I

Mathematics

Teacher's Guide
2018/2019

Term 1

Foreword

This is a pivotal time in the history of the Ministry of Education and Technical Education (MOETE) in Egypt. We are embarking on the transformation of Egypt's K-12 education system starting in September 2018 with KG1, KG2 and Primary 1 continuing to be rolled out year after year until 2030. We are transforming the way in which students learn to prepare Egypt's youth to succeed in a future world that we cannot entirely imagine.

MOETE is very proud to present this new series of textbooks, Discover, with the accompanying digital learning materials that captures its vision of the transformation journey. This is the result of much consultation, much thought and a lot of work. We have drawn on the best expertise and experience from national and international organizations and education professionals to support us in translating our vision into an innovative national curriculum framework and exciting and inspiring print and digital learning materials.

The MOETE extends its deep appreciation to its own "Center for Curriculum and Instructional Materials Development" (CCIMD) and specifically, the CCIMD Director and her amazing team. MOETE is also very grateful to the minister's senior advisors for curriculum and early childhood education. Our deep appreciation goes to "Discovery Education," "Nahdet Masr," "Longman Egypt," UNICEF, UNESCO, World Bank Education Experts and UK Education Experts who, collectively, supported the development of Egypt's national curriculum framework. I also thank the Egyptian Faculty of Education professors who participated in reviewing the national curriculum framework. Finally, I thank each and every MOETE administrator in all MOETE sectors as well as the MOETE subject counselors who participated in the process.

This transformation of Egypt's education system would not have been possible without the significant support of Egypt's current president, His Excellency President Abdel Fattah el-Sisi. Overhauling the education system is part of the president's vision of 'rebuilding the Egyptian citizen' and it is closely coordinated with the ministries of higher education & scientific research, Culture, and Youth & Sports. Education 2.0 is only a part in a bigger national effort to propel Egypt to the ranks of developing countries and to ensure a great future to all of its citizens.

Words From
The Minister of Education
& Technical Education

It is my great pleasure to celebrate this extraordinary moment in the history of Egypt where we launch a new education system designed to prepare a new Egyptian citizen proud of his Egyptian, Arab and African roots - a new citizen who is innovative, a critical thinker, able to understand and accept differences, competent in knowledge and life skills, able to learn for life and able to compete globally.

Egypt chose to invest in its new generations through building a transformative and modern education system consistent with international quality benchmarks. The new education system is designed to help our children and grandchildren enjoy a better future and to propel Egypt to the ranks of advanced countries in the near future.

The fulfillment of the Egyptian dream of transformation is indeed a joint responsibility among all of us; governmental institutions, parents, civil society, private sector and media. Here, I would like to acknowledge the critical role of our beloved teachers who are the role models for our children and who are the cornerstone of the intended transformation.

I ask everyone of us to join hands towards this noble goal of transforming Egypt through education in order to restore Egyptian excellence, leadership and great civilization.

My warmest regards to our children who will begin this journey and my deepest respect and gratitude to our great teachers.

Dr. Tarek Galal Shawki
Minister of Education & Technical Education

Contents

How to Use This Guide

The Mathematics teaching guide is designed to support teachers in the preparation and implementation of learning activities by providing clear, step-by-step instructions embedded with teacher input, instructional strategies, and classroom management techniques.
In these learning activities, students explore, play, use manipulatives, move their bodies, communicate and collaborate with colleagues, ask and seek answers to questions, and practice new skills and concepts.

This instructional approach aims to help students accomplish the following goals:

- Build early numeracy
- Discover connections between and among math concepts
- Develop foundational computational skills
- Acquire and use math vocabulary
- Build awareness of measurement concepts and geometric shapes
- Enhance critical thinking, problem solving, collaboration, and communication
- Increase enjoyment of math

If instructors have not used such a guide before, some practical advice follows:

- Read each chapter carefully. Make notes and highlight important details.
- Take particular note of sections labeled **Term**, **Chapter**, or **Lesson Preparation for the Teacher**. These sections include steps the teacher will need to complete in order to implement the activities in the term, chapters, and lessons. Advance preparation will ease the instructor's workload and ensure successful learning experiences for students.
    - Gather the necessary materials and make any preparations before implementing the lessons.
    - Consider additional classroom management techniques necessary for your particular class and learning environment.

- Please note that a section of the Student Book has been designated as a Math Journal. The Math Journal is referenced throughout the teacher's guide. Students will draw, write, and complete math activities in their journals.
    - Math Journals are a wonderful resource for informally assessing student progress. They can help the instructor determine whether or not students are successfully learning and applying new skills and concepts. They can also provide critical information about the kinds of mistakes students are making. That information can be used to plan future instruction and differentiation.
- Take note of the following:
    - What are the pupils discovering or learning? (Content)
    - What are the students being asked to do? (Activity)
    - What is the teacher discovering about the pupils? (Assessment)
    - How could you adapt the lesson for the different abilities in your class? (Differentiation)

- During and after implementing each lesson, reflect and make notes on what was successful and possible suggestions for improvement.
- Planning with another teacher can often lead to greater implementation success as it provides an opportunity to discuss classroom expectations and management procedures and ensures that lessons are differentiated to better suit the needs of students. It is suggested that teachers meet with other instructors at least weekly to plan and reflect.

Background

In this Teacher Guide, Mathematics instruction is divided into Chapters. Each Chapter includes 10 days of instruction. The teaching of mathematics and the building of numeracy is very linear, with students learning new content in increments, and adding to their conceptual development and understanding slowly over time.

Mathematics lessons are organized into three components:

- Calendar and Movement (15-20 minutes)
  - During this daily routine, students develop number sense, early place value concepts, counting fluency and problem-solving skills. Students explore quantity and practice counting through patterns and movement.
- Learn (25-30 minutes)
  - During this daily routine, students learn and apply various math skills as the Teacher Guides them through review, instruction and practice.
- Share (5-10 minutes)
  - During this daily routine, students develop their ability to express mathematical ideas.

Some Instructional Considerations
Each section should be implemented every day. However, in some cases, students may need a few more minutes for one section and another section (or two) will have to be shortened for that day. The instructor should use best judgment and knowledge of students and their needs.

Story problems and numbers are provided as examples. The instructor can use the story and numbers provided or create stories of their own. If the numbers in a story problem or sample problem are changed, be sure to limit the quantities to those identified in the indicators and outcomes (for example, "within 10").

The instructor is encouraged to incorporate familiar counting songs, poems, rhymes, math stories/literature, and math games and activities that are not included in this Teacher Guide.

KG 1

Mathematics Scope and Sequence for Term 1

MATH	CHAPTERS 1-3	CHAPTERS 4-6
COUNTING AND CARDINALITY		
Count objects to tell how many there are.	X	
Count by ones from 0 to 5.	X	
Count by ones up to 10.	X	X
Read and write numerals from 0 to 10.		X
Understand the relationship between numbers and quantities to five.	X	
Write numbers and represent quantities with a number.		X
Represent a number (0-5) by producing a set of objects or pictures.	X	X
Identify the number of objects in familiar groupings without counting.	X	X
Apply the understanding that each successive number name refers to a quantity that is one larger as they count.	X	
Understand the concepts of greater than, less than, and equal to with up to 5 objects.		X
Compare two numbers between 1 and 10 presented as objects, drawings, etc.	X	X
OPERATIONS AND ALGEBRAIC THINKING		
Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, or verbal explanations, expressions, or equations.		X
MEASUREMENT		
Compare orally between length and weight and size using longer than/shorter than, heavier/lighter, bigger/smaller.	X	X
Collect and classify data using objects and drawings (up to 10).		X
Classify objects into given categories (for example length, weight, size, color) and sort categories by count.	X	X
GEOMETRY		
Describe objects in the environment using names of shapes.	X	
Correctly name 2-dimensional shapes (triangle, circle, rectangle, square).	X	
Compose larger shapes by combining simple shapes.	X	

KG 1 Mathematics Pacing Guide for Term 1

CHAPTER	DAY	INSTRUCTIONAL FOCUS
1	1	Students will: • Identify the month, day, and date • Identify 1 • Count objects to tell how many there are
	2	Students will: • Identify the month, day, and date • Count from 1 to 2 • Count objects to tell how many there are • Sky write numbers 1 to 2
	3	Students will: • Identify the month, day, and date • Count from 1 to 2 • Learn routines for using manipulatives • Count objects to tell how many there are to the number 2 • Make equivalent sets up to 2 • Sky write numbers 1 to 2
	4	Students will: • Identify the month, day, and date • Count from 1 to 3 • Count objects to tell how many there are to the number 3 • Sky write numbers 1 to 3
	5	Students will: • Identify the month, day, and date • Count from 1 to 3 • Sky write numbers 1 to 3 • Draw circles
	6	Students will: • Identify the month, day, and date • Count from 1 to 3 • Sky write numbers 1 to 3 • Identify and count sides and corners of a triangle • Draw triangles
	7	Students will: • Identify the month, day, and date • Count from 1 to 4 • Use a five frame to recognize quantities 1-4 • Identify and count sides and corners of a square • Draw squares
	8	Students will: • Identify the month, day, and date • Count from 1 to 4 • Sky write number 4 • Use dot cards to recognize quantities 1-4 • Draw circles, triangles, and squares

CHAPTER	DAY	INSTRUCTIONAL FOCUS
1	9	Students will: • Identify the month, day, and date • Count from 1 to 4 • Sky write numbers 1 to 4 • Count objects to tell how many there are to the number 4 • Create dot cards 1-4
	10	Students will: • Identify the month, day, and date • Identify and count sides and corners of a rectangle • Compare squares and rectangles • Compare lengths using the terms longer and shorter
2	11	Students will: • Identify the month, day, and date • Count from 1 to 5 • Use a five frame to recognize quantities 1-5 • Count objects to tell how many there are to the number 5 • Compare objects using the terms longer and shorter
	12	Students will: • Identify the month, day, and date • Count from 1 to 5 • Sky write number 5 • Count objects to tell how many there are up to 5 • Demonstrate understanding of the relationship between number and quantity
	13	Students will: • Identify the month, day, and date • Count from 1 to 5 • Sky write numbers 1 to 5 • Compare quantities using the terms more and less • Demonstrate understanding of the relationship between number and quantity
	14	Students will: • Identify the month, day, and date • Count from 1 to 5 • Create a dot card for 5 • Compare quantities using the terms 1 more and 1 less
	15	Students will: • Identify the month, day, and date • Count from 1 to 6 • Use five frames to recognize quantities 1-6 • Count objects to tell how many there are to the number 6 • Sort objects by shape
	16	Students will: • Identify the month, day, and date • Count from 1 to 6 • Sky write number 6 • Count objects to tell how many there are up to 6 • Sort objects by shape and color
	17	Students will: • Identify the month, day, and date • Count from 1 to 6 • Sky write numbers 1-6 • Create a dot card for 6 • Sort objects by shape and color

CHAPTER	DAY	INSTRUCTIONAL FOCUS
2	18	Students will: • Identify the month, day, and date • Review written numbers 1-5 • Visually represent quantities 1-5 using pictures, objects, and number line • Collect data • Compare quantities to find more, less, and equal
	19	Students will: • Identify the month, day, and date • Practice counting up to 6 • Visually represent quantities 1-6 using pictures, objects, and number line • Answer questions about survey data • Compare quantities to find more, less, and equal
	20	Students will: • Identify the month, day, and date • Practice counting up to 7 • Visually represent quantities 1-7 using pictures and objects • Answer questions about survey data • Compare quantities to find more, less, and equal
3	21	Students will: • Identify the month, day, and date • Participate in data collection activities • Answer questions about a class graph • Count to 8 • Visually represent quantities up to 8 using pictures
	22	Students will: • Identify the month, day, and date • Participate in data collection activities • Answer questions about a class graph • Count to 9 • Visually represent quantities up to 9 using pictures
	23	Students will: • Identify the month, day, and date • Participate in data collection activities • Answer questions about a class graph • Count to 10 • Visually represent quantities up to 10 using pictures
	24	Students will: • Identify the month, day, and date • Participate in data collection activities • Answer questions about a class graph • Write numerals 1, 2, and 3 • Visually represent quantities up to 3 using pictures
	25	Students will: • Identify the month, day, and date • Participate in data collection activities • Answer questions about a class graph • Write numerals 4, 5, and 6 • Visually represent quantities up to 6 using pictures
	26	Students will: • Identify the month, day, and date • Participate in data collection activities • Answer questions about a class graph • Write numerals 7, 8, and 9 • Visually represent quantities up to 9 using pictures

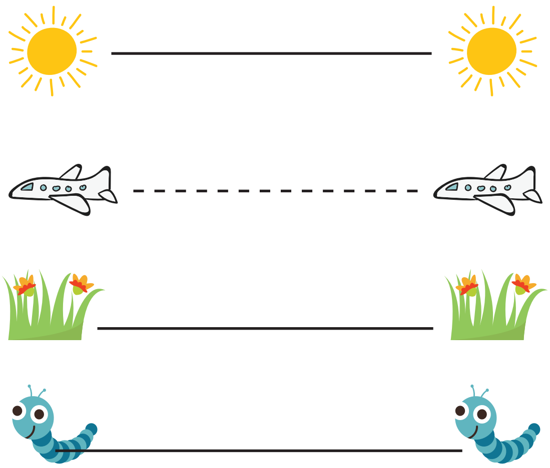
CHAPTER	DAY	INSTRUCTIONAL FOCUS
3	27	Students will: • Identify the month, day, and date • Write numerals up to 10 • Visually represent the quantities up to 10 using pictures • Use the terms greater than and less than
	28	Students will: • Identify the month, day, and date • Write numerals up to 10 • Visually represent quantities up to 10 • Identify the days of the week that are today, tomorrow, and yesterday • Use the terms greater than, less than, and equal to
	29	Students will: • Identify the month, day, and date • Write numerals up to 10 • Visually represent quantities up to 10 • Identify the days of the week that are today, tomorrow, and yesterday • Compare two quantities • Use the terms greater than, less than, and equal to
	30	Students will: • Identify the month, day, and date • Write numerals up to 10 • Visually represent quantities up to 10 • Identify the days of the week that are today, tomorrow, and yesterday • Compare two quantities • Use the terms greater than, less than, and equal to
4	31	Students will: • Participate in Calendar Math activities • Compare and sort colleagues based on attributes • Count from 1 to 10 • Write numerals 1 and 2 • Match numbers to their names • Find “one more” and “one less” than a number • Demonstrate understanding of the relationship between number and quantity up to 5
	32	Students will: • Participate in Calendar Math activities • Compare and sort colleagues based on attributes • Count from 1 to 10 • Write numerals 3 and 4 • Match numbers to their names • Find “one more” and “one less” than a number • Demonstrate understanding of the relationship between number and quantity up to 5
	33	Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Identify the number of objects in familiar groupings • Demonstrate understanding of the relationship between number and quantity up to 5
	34	Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write numerals 1-5 • Match numbers to their names • Identify the number of objects in familiar groupings • Demonstrate understanding of the relationship between number and quantity up to 5

CHAPTER	DAY	INSTRUCTIONAL FOCUS
4	35	Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write numerals 6-10 • Match numbers to their names • Demonstrate understanding of the relationship between number and quantity up to 5 • Apply strategies to determine whether two parts make a given whole (5)
	36	Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Demonstrate understanding of the relationship between number and quantity up to 5 • Identify the number of objects in familiar groupings • Apply strategies to determine whether two parts make a given whole (5)
	37	Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Sky write numbers 1-10 • Use the counting on strategy • Compose numbers to 5 using actions, drawings, and models
	38	Students will: • Participate in Calendar Math activities • Count from 1 to 5 • Match numbers to their names • Represent composition story situations with drawings using numeric number bonds • Represent composition to 5 using numeric number bonds
	39	Students will: • Participate in Calendar Math activities • Count from 1 to 5 • Match numbers to their names • Represent composition story situations with drawings using numeric number bonds
	40	Students will: • Participate in Calendar Math activities • Count from 1 to 5 • Match numbers to their names • Represent composition story situations with drawings using numeric number bonds
5	41	Students will: • Participate in Calendar Math activities • Count from 1 to 11 • Recognize 11 as 10 and 1 more • Match numbers to their names • Find "one more" and "one less" than a number
	42	Students will: • Participate in Calendar Math activities • Count from 1 to 12 • Recognize 12 as 10 and 2 • Match numbers to their names • Find "one more" and "one less" than a number
	43	Students will: • Participate in Calendar Math activities • Count from 1 to 13 • Recognize 13 as 10 and 3 • Understand the relationship between numbers and quantities up to 10

CHAPTER	DAY	INSTRUCTIONAL FOCUS
5	44	Students will: • Participate in Calendar Math activities • Count from 1 to 14 • Recognize 14 as 10 and 4 • Understand the relationship between numbers and quantities up to 10
	45	Students will: • Participate in Calendar Math activities • Count from 1 to 15 • Recognize 15 as 10 and 5 • Model composition and decomposition of number to 10 using actions, objects, and drawings
	46	Students will: • Participate in Calendar Math activities • Count from 1 to 16 • Recognize 16 as 10 and 6 • Represent composition story situations within 10 with drawings using numeric number bonds
	47	Students will: • Participate in Calendar Math activities • Count from 1 to 17 • Recognize 17 as 10 and 7 • Represent composition within 10 using numeric number bonds
	48	Students will: • Participate in Calendar Math activities • Count from 1 to 18 • Recognize 18 as 10 and 8 • Represent decomposition within 10 using numeric number bonds
	49	Students will: • Participate in Calendar Math activities • Count from 1 to 19 • Recognize 19 as 10 and 9 • Represent decomposition within 10 using numeric number bonds
	50	Students will: • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 20 as 2 tens • Represent decomposition and composition within 10 using numeric number bonds
6	51	Students will: • Participate in calendar math activities • Count from 1 to 20 • Write the numeral 11 • Identify the number of objects in familiar groupings without counting • Compare lengths using longer and shorter
	52	Students will: • Participate in calendar math activities • Count from 1 to 20 • Write the numeral 12 • Identify the number of objects in familiar groupings without counting • Compare lengths using longer and shorter

CHAPTER	DAY	INSTRUCTIONAL FOCUS
6	53	Students will: • Participate in calendar math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 13 • Identify the number of objects in familiar groupings without counting • Collect data to create a pictograph • Compare data on a pictograph
	54	Students will: • Participate in calendar math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 14 • Identify the number of objects in familiar groupings without counting • Compare numerical data using greater than, less than, and equal to
	55	Students will: • Participate in calendar math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 15 • Identify the number of objects in familiar groupings without counting • Compare numerical data using greater than, less than, and equal to
	56	Students will: • Participate in calendar math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 16 • Identify the number of objects in familiar groupings without counting • Compare weights using heavier and lighter
	57	Students will: • Participate in calendar math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 17 • Identify the number of objects in familiar groupings without counting • Compare weights using heavier and lighter
	58	Students will: • Participate in calendar math activities • Count from 1 to 20 • Identify the number of objects in familiar groupings without counting • Find combinations that make 10
	59	Students will: • Participate in calendar math activities • Count from 1 to 20 • Write the numeral 19 • Classify objects and into categories and count • Identify the number of objects in familiar groupings without counting • Greater than, less than, equal to up to 20
	60	Students will: • Participate in calendar math activities • Count from 1 to 20 • Write the numeral 20 • Identify the number of objects in familiar groupings without counting • Greater than, less than, equal to up to 20

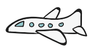
Sky Writing Procedure



Teacher will need dry erase or chalkboard with these lines:

The lines should always be referred to by their name, even if the icons are not on regular lined paper. Before writing students should identify where each line is located.

 is called the "Sky Line"

 is called the "Plane line"

 is the "Grass Line"

 is the "Worm Line"

Sky Writing posture: standing with dominant hand raised straight out (do not bend the elbow). Use two fingers and rotate at the shoulder when Sky Writing.

The teacher writes on the lines and says the steps out loud. Then, students trace the number in the air, saying the steps out loud with the teacher. Repeat each number.

Example: steps to say out loud for Sky Writing the number 1.

"Start at the Sky Line, go straight down to the grass line."

Math Counting Games

The math games described below are integrated throughout the daily lessons. This is not intended to be a comprehensive list, rather it highlights best practices for engaging students in active, inquiry- and game-based learning. Games can be adapted for many number targets. Forty is used as a consistent example.

Bingo
Create or print out **number charts** from 1-40 as shown below. You will need one chart for each student. Gather enough **counting objects** for each student to have 40.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

Call out random numbers from the number chart. Students will find the number and place a counter on it. Repeat until the class has covered a row or column of numbers.

Counting Colleagues
The teacher points to self and says, "One." The teacher then points to a student who stands and says, "Two." That student then points to a peer who stands and says, "Three." The game continues until the class reaches 40. Once 40 students are standing, students will count again, this time sitting when their colleague points to them.

Catch and Count
This game is played the same as the game above, but instead of pointing, the students gently toss a **ball** to their colleagues. The student who catches the ball stands and counts and then gently tosses the ball to the next colleague.

Counting Cups
In Counting Cups, students play in small groups. Prepare for the activity by gathering 4 paper or Styrofoam cups for each small group. Write 10 on each cup. Gather counting objects so each group has 40. Place them in bags or cups to make it easy to hand them out. Prepare the recording sheets (or have students create them) shown below.

Cups	Counters
1	
2	
3	
4	

Each student needs a recording sheet. To play, students first place 10 counters into each cup. Then, students dump out 1, 2, 3, or 4 cups of counters, count the objects, and record the total on the recording sheet across from the number of cups they dumped out. Each time students finish dumping out counters and counting, they should return 10 counters to each cup. Students will continue to dump out cups and record the totals until the recording sheet is filled.

Jump Up Game
Students squat down and clap from 1 to 40. Each time they get to a ten (10, 20, 30, 40), they jump up and shout that number.

Missing Number Detectives
Create several activity sheets that show numbers in a sequence with some of the numbers missing (examples shown below). Students work independently or in pairs to fill in the missing numbers.

1	2		4	
6			9	10

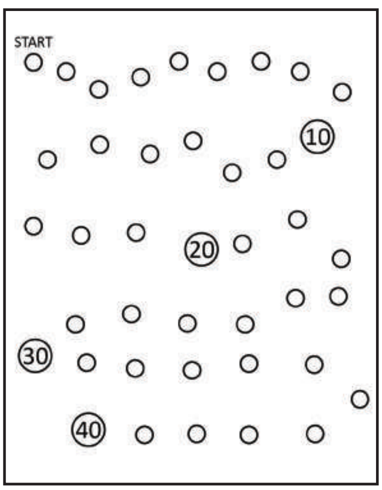
23	24	25		
28		30		32

	13	14		16
		19		21

31		33		35
	37		39	

Alternatively, this activity can be completed on one recording sheet showing 1-40 (example shown below).

1	2			5	6		8		10
	12	13		15			18	19	
21			24		26	27		29	30
		33	34			37			







Race to 40
This game can be played by 2-4 players. To prepare, create or print out **game boards** as shown below. Write numbers 1-40 in circles on a winding path around the game board. Write tens numbers in larger circles. Create **5 tortoise and 5 hare cards** for each group (examples shown below). Each group will need a **different counter or game piece** for each player. Tortoise and hare cards are shuffled and placed face down. All students start at 1 and take turns turning over a card. If a tortoise card is turned over, the student moves 1 space. If a hare card is turned over, the student moves 10 spaces. Once everyone has turned over a card and moved their game piece, the first student turns over a second card and students continue playing in order. When all cards are used, a student should shuffle them and turn them face down again. The first player to reach 40 wins!



Tower of Tens
In this activity, students create a tower of cups to help them count from 0-40. Each student need **5 Styrofoam cups** and **pens or markers** (different colors, if possible). Students take one cup, turn it upside down, and write 0 on the lip as shown below. Turn the second cup upside down and write 10 on the lip. Third cup: 20. Fourth cup: 30. Last cup: 40. On each cup, students should write the numbers 1-9 from the lip of the cup to the bottom of the cup as shown. When finished, students can use their cups to practice counting from 0 to 40.

KINDERGARTEN I

Mathematics

CHAPTER 1

Lessons 1-10

Overview

Lessons 1-10

COMPONENT	DESCRIPTION	TIME
Calendar and Movement	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills. Students explore quantity and practice counting through patterns and movement.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from colleagues' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY:

- Count objects to tell how many there are.
- Count by ones from 0 to 5.
- Understand the relationship between numbers and quantities to five.
- Represent a number (0-10) by producing a set of objects or pictures.
- Apply the understanding that each successive number name refers to a quantity that is one larger as they count.
- Compare two numbers between 1 and 10 presented as objects, drawings, etc.

MEASUREMENT:

- Compare orally between length and weight and size using longer than/shorter than, heavier/lighter, bigger/smaller.

GEOMETRY:

- Describe objects in the environment using names of shapes.
- Correctly name 2-dimensional shapes (triangle, circle, rectangle, square).

Day 1-10 Pacing Guide

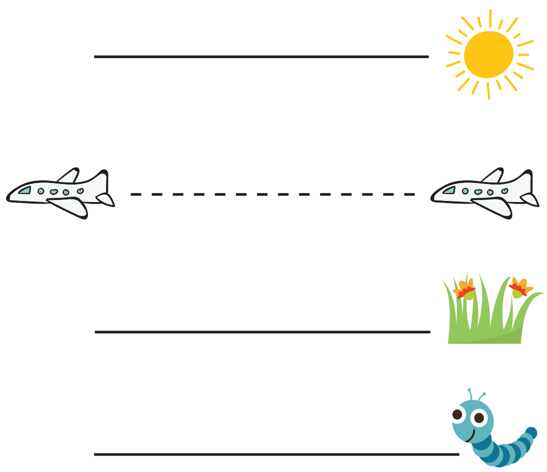
LESSON	INSTRUCTIONAL FOCUS
1	**Students will:** • Identify the month, day, and date • Identify 1 • Count objects to tell how many there are
2	**Students will:** • Identify the month, day, and date • Count from 1 to 2 • Count objects to tell how many there are • Sky write numbers 1 to 2
3	**Students will:** • Identify the month, day, and date • Count from 1 to 2 • Learn routines for using manipulatives • Count objects to tell how many there are to the number 2 • Make equivalent sets up to 2 • Sky write numbers 1 to 2
4	**Students will:** • Identify the month, day, and date • Count from 1 to 3 • Count objects to tell how many there are to the number 3 • Sky write numbers 1 to 3
5	**Students will:** • Identify the month, day, and date • Count from 1 to 3 • Sky write numbers 1 to 3 • Draw circles
6	**Students will:** • Identify the month, day, and date • Count from 1 to 3 • Sky write numbers 1 to 3 • Identify and count sides and corners of a triangle • Draw triangles
7	**Students will:** • Identify the month, day, and date • Count from 1 to 4 • Use a five frame to recognize quantities 1-4 • Identify and count sides and corners of a square • Draw squares

LESSON	INSTRUCTIONAL FOCUS
8	**Students will:** • Identify the month, day, and date • Count from 1 to 4 • Sky write number 4 • Use dot cards to recognize quantities 1-4 • Draw circles, triangles, and squares
9	**Students will:** • Identify the month, day, and date • Count from 1 to 4 • Sky write numbers 1 to 4 • Count objects to tell how many there are to the number 4 • Create dot cards 1-4
10	**Students will:** • Identify the month, day, and date • Identify and count sides and corners of a rectangle • Compare squares and rectangles • Compare lengths using the terms longer and shorter

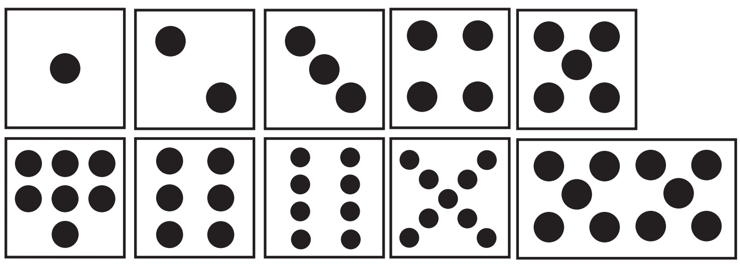
Term 1 Preparation for the Teacher

Note for the Teacher: The following items will be used in some form throughout your theme daily. Careful preparation of them in advance is necessary for successful implementation of daily lessons.

- Create **Calling Sticks**: Write the name of each student on a wooden stick. Store them in a cup or jar.
- Create a **Sky Writing** Grid to be used for writing numbers. (See page 20-21 of this guide for detailed instructions on how to use the **Sky Writing** Grid.)
    - Create the following on the chalkboard, chart paper, or dry erase board:



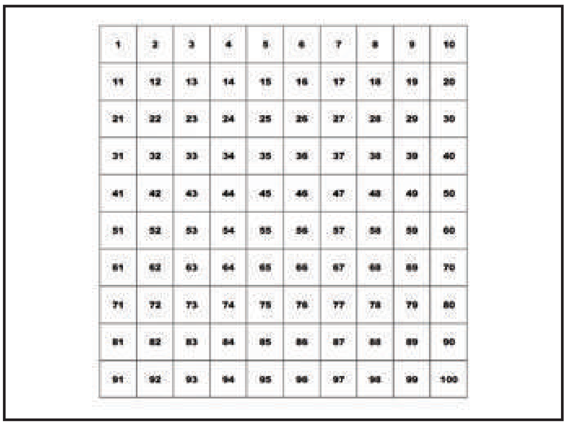
- Create a set of large (15-20 cm) dot cards showing numbers from 1-10.



    - If possible, have a set of dot stickers for students to use to create their own dot cards. Otherwise, they can use markers or crayons to draw the dots.
    - Make a plan for how you will manage Students' Dot Cards. Consider having plastic or paper bags labeled with students' names. After each use, they can place the dot cards in the bags so you can easily collect them.

- Create a Calendar Math Area in your classroom. During each math lesson, gather the students to the Calendar Math Area for instruction and conversation, if possible. Although the teacher leads Calendar Math instruction at the beginning of the year, students gradually take on more independence and leadership as they grow more confident over time. The Calendar Math Area should include the following:
    - Large calendar
        * May be a prepared calendar (such as a store-bought 12 month calendar) or a reusable teaching calendar with spaces to write or attach the days of the week and numbers for each day.
    - A place to write the date each day
    - The names of all the months
    - Recommended: A hundreds chart (1-100)





Create student math journals.
    - Students may use a pre-made notebook or you can create a journal by stapling or clipping a few sheets together for each student.
    - Students will use them daily to record drawings, thoughts, ideas, vocabulary, and math work.

Note for the Teacher: Decide where you will store math journals in your classroom. It should be a place where you or your students can get to them quickly. Some days, you may wish to do a quick check of students' journals to determine who may need extra instruction or help. Other days, you may wish to do a more formal review of students' work.

Day 20: Celebrating Shapes

- On Day 20, students will create art projects using circles, squares, triangles, and rectangles. They will need a large collection of items to trace or glue down to create pictures. It is suggested that you read the lesson in advance and begin to prepare as early as possible.
    - If possible, no later than Day 11 send a letter home with students asking parents to trace 1 example of each shape onto light cardboard (such as a cereal box or shoe box), cut them out, and send them to school with their children. That way, students will have a large collection of different-sized shapes to trace for their art projects.
    - Another option is to ask students to bring in found objects (with permission from their parents!) that they can use to trace shapes (or glue onto paper). Examples include: straws, empty toilet paper and paper towel rolls, old CDs, old CD cases, playing cards, shapes cut from cereal boxes (with parent's help!), and round lids and caps.

Day 30: Celebrating 10

- On Day 30, students will celebrate the number 10. They will engage in fun activities in which they explore number concepts, counting, and quantities to 10. The lesson includes descriptions of each activity along with directions for creating them and materials needed for each. It is suggested that you read the lesson in advance and begin to prepare as early as possible. It may be helpful to ask volunteers to donate time and materials to support the celebration.

- Consider making 2-3 copies of each activity so multiple students can play the same games. You will use them throughout the year.
- Think about how you would like to organize and store the activities so the pieces stay together and students can access them independently after Day 30.
- Materials needed for the activities: wooden clothespins (the kind that open and close), empty cereal boxes, markers and paint, scissors, hole punch, clean cardboard egg cartons, chenille stems (pipe cleaners), construction paper, butcher paper or wrapping paper, large wooden blocks or interlocking building blocks (like Duplo Legos), ice cube trays, empty tissue boxes (cube shape), baking trays or plastic trays, bag of clean sand or salt, paper clips, tape, glue, ruler or straight edge

Lesson 1 Overview

OUTCOMES

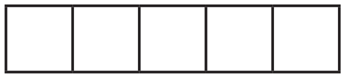
Students will:
- Identify the month, day, and date
- Identify 1
- Count objects to tell how many there are

STUDENT VOCABULARY:

- Calendar
- Month
- Day
- One
- Share
- Five Frame

LESSON PREPARATION FOR THE TEACHER

- Create or print out a five frame. You will use the same five frame throughout Units 1 and 2 of this Theme.
- Color and cut out 5 dots to use on five frame. The dots should fit in the squares. For today's lesson, you will need only 1 dot.

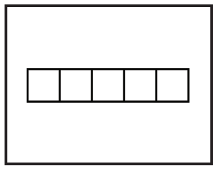


MATERIALS

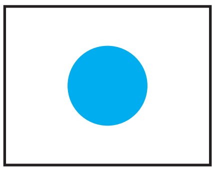
Calendar Math Area



Five Frame



Large dot



Tape or glue stick



Calendar and Movement (15-20 mins)

Directions

Note for the Teacher: Today you will be introducing the daily math routine to students. This begins with Calendar and Movement.

1. TEACHER SAY: **Welcome students! I am so excited for our school year together! Our math time together will be a time to use numbers to describe and order things around us.**
When it is math time, we will always begin by looking at our calendar. Sometimes I will talk about the calendar. Other times you will have a chance to talk about the calendar with each other.

Please raise your hand if you have seen a calendar before.

STUDENTS DO: Raise their hands if they have seen a calendar before.

2. TEACHER SAY: **Wonderful! Some of you have seen a calendar before. It is ok if you haven't. We are here to learn. I want you to think about where you have seen a calendar, who had it, and why you think they used it. You will look like this.**

TEACHER DO: Make exaggerated thinking face.

TEACHER SAY: **Hmmm, (say your name) asked me to think about where I've seen a calendar, who had it, and why I thought they used it.**

TEACHER DO: Pause and continue making an over exaggerated thinking face.

TEACHER SAY: Now I am going to give you a chance to do the same. I want you to think in your brain, and do not say anything. Where you have seen a calendar? Who had it? How do you think they used it?

TEACHER DO: Give students time to think about what they are going to say. Remind them that you think quietly with our brains and not by talking. They will get a chance to **Turn and Talk** in a moment.

TEACHER SAY: I love how you are thinking with your brain, and not with your mouth.

3. TEACHER SAY: Now, when I say go but not until I say go you will Turn and Talk to your Shoulder Partner. Tell them what you have been thinking about calendars. Go.

STUDENTS DO: Talk to their **Shoulder Partner** to say what they think a calendar shows.

TEACHER DO: Walk around the classroom and listen to student responses to get an idea of who is familiar with the use of calendar.

4. TEACHER DO: Get students' attention again.

TEACHER SAY: The calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.

Note for the Teacher: Each day you will you point out the name of the month. This repetition will help students learn the names of the months of the year.

5. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: This is where you will see the name of the month. We are in the month of (current month). Please say it with me.

STUDENTS DO: Repeat the month aloud.

Note for the Teacher: Having students whisper into their hands lets them participate without worrying about whether other students hear if they are right or wrong. This builds their confidence in participating.

6. TEACHER SAY: I am going to ask a question, but you won't tell me or anyone else the answer. You will whisper your answer into your hand like this.

TEACHER DO: Demonstrate for students how they will cover their mouths and whisper softly into their hands.

TEACHER SAY: Let's practice. I will ask a question, you whisper it in to your hand like this. Ready? What is your name? Whisper it into your hand.

STUDENTS DO: Whisper name in hand.

TEACHER SAY: Good job! Look at the numbers on the calendar. What numbers do you already know? Whisper your answer into your hand.

STUDENTS DO: Whisper into their hands any number that they see and/or know.

TEACHER DO: Look for students who are not identifying any numbers at this point. Use this knowledge to provide extra support to these students, especially early on.

Note for the Teacher: Students may not know what the numbers on the calendar mean. Explain to students that the numbers tell them how many days have happened in the month

7. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Look at the numbers on the calendar. Each day has its own number. The numbers tells us the date. The date tells us how many days have happened so far in the month. The numbers also tell us how many days there are in the month.

TEACHER SAY: This square on the calendar represents today. Today is (day) the (date) of (month) (year). Can you say the date too?

STUDENTS DO: Repeat the date.

Note for the Teacher: Every day you will finish off Calendar time by doing Movement Math. Movement Math helps students to recognize patterns in counting and cardinality by engaging multiple senses at once.

8. TEACHER SAY: Every day we will do math by moving our bodies in patterns. A pattern is something that repeats. The first one is going to be easy but they will get harder. For the first one I am going to clap my hands and each time I will say the number 1. Watch me and join in when you understand the pattern.

TEACHER DO: On a steady beat slowly clap while repeating 1 each time you clap. Repeat the pattern until all students are following along.

STUDENTS DO: Clap the pattern along with the teacher, and say 1 with each clap.

TEACHER SAY: Boys and girls, you have done a fantastic job with Calendar Time today. Whisper to your Shoulder Partner and tell them "Great job!"

STUDENTS DO: Tell **Shoulder Partner**s, "Great job!"

Learn (25-30 mins)

Directions

1. TEACHER SAY: You just practiced counting one clap on your hands. Let's practice counting more movements. I will give a direction, and then you will do what I say to do. Watch me first. If I say hop one time, you hop one time.

TEACHER DO: Stand and carefully hop one time.

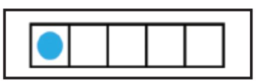
TEACHER SAY: I was careful not to hop on anyone. How many times did I hop? Yes, only one time! Let's try it! Stand and make sure you have enough room.

TEACHER DO: Be sure to provide enough time for all students to complete each direction before moving on the next one.

TEACHER SAY:

- **Hop one time.**
- **Touch your toes 1 time.**
- **Pretend to be a chicken and flap your wings 2 time.**
- **Stand on 1 foot.**
- **Hop on one foot 1 time.**
- **Hop on the other foot 1 time.**
- **Give your Shoulder Partner 1 high five.**
- **Shake hands with your Shoulder Partner 1 time.**
- **Turn around 1 time and sit back down.**
- **Great job!**

STUDENTS DO: Follow each direction, doing only one of each movement.



2. TEACHER DO: Display the five frame so all students can see it. Add one dot in the first square.

TEACHER SAY: Think, but don't say – how many dots do you see? Now show me on your fingers how many dots you see.

STUDENTS DO: Show 1 on their fingers.

TEACHER SAY: **Lean and whisper to your Shoulder Partner.**

STUDENTS DO: **Lean and whisper** to their **Shoulder Partner**.

TEACHER SAY: **How many dots? Everyone say it together: One!**

STUDENTS DO: Answer together.

TEACHER SAY: **Great! We will practice counting together again tomorrow.**

Share (5 mins)

Directions

Note for the Teacher: Students will have the opportunity each day to **Turn and Talk** *about what they have learned during the lesson. Reflecting on what students have learned and sharing it with others helps make the learning concrete. Students will learn from hearing how colleagues think about math concepts, and gain confidence in their understanding of math concepts.*

1. **TEACHER SAY:** **We have certainly learned a lot during our math time today. At the end of each lesson, you will have time to talk or share about what you learned and to ask questions. Think quietly to yourself, "What did you learn today?"**

TEACHER DO: Provide ample wait time to allow students to reflect upon what they have learned.

STUDENTS DO: Think about what they learned today.

2. **TEACHER SAY:** **Share something you learned today with your Shoulder Partner.**

TEACHER DO: Allow students time to share.

STUDENTS DO: Share what they learned with their **Shoulder Partner**.

3. **TEACHER SAY:** **You have worked hard on your first day of math. You should feel proud of yourself. Give yourself one pat on the back. When I do that, it looks like this.**

TEACHER DO: Give yourself one pat on the back.

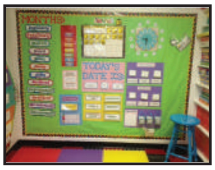
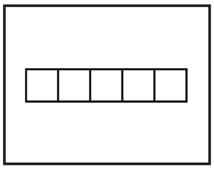
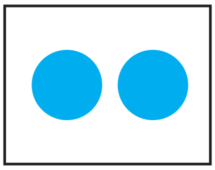
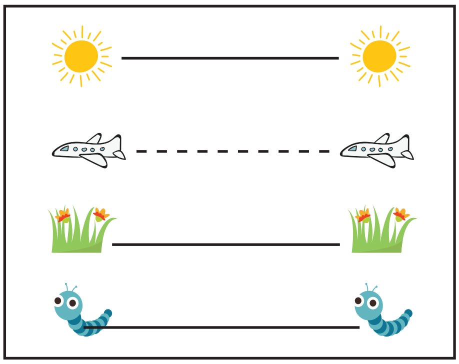
TEACHER SAY: **Now it's your turn. Give yourself one pat on the back.**

STUDENTS DO: Reach up and pat their back one time.

Lesson 2 Overview

OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date • Count from 1 to 2 • Count objects to tell how many there are up to 2 • Sky write numbers 1 to 2	• Calendar • Month • Day • Share • Two • **Sky writing** • Five Frame	• Use the five frame with 1 dot from Day 1 and have another dot ready.

MATERIALS

Calendar Math area		Five Frame (from previous lesson)	
2 Dots		Tape or glue stick	
Sky Writing Grid			

Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: It's Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year such as your birthday and special holidays. Every day we will be practicing our math skills using a calendar.

TEACHERS DO: Point to the month at the top of the calendar.

TEACHER SAY: We are in the month of (current month). What month are we in?

STUDENTS DO: Repeat the month.

Note for the Teacher: You will be adding on to Calendar time today by introducing the days of the week.

Students are not expected to know them all at the beginning of the school year. With daily repetition, students will eventually be able to say the days of the week with you.

2. TEACHER DO: Point to the days of the week on the calendar.

TEACHER SAY: Each square on the calendar represents a day. All of the days in a row make up a week.

TEACHER DO: Point to the days in one week.

TEACHER SAY: Each day in a week has its own name. I will say the name then you repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

STUDENTS DO: Repeat the days of the week after the teacher.

TEACHER SAY: You just named all the days in a week!

3. TEACHER SAY: Look at the numbers on the calendar. Each day has its own number. The numbers tells us the date. The date tells us how many days have happened so far in the month. The numbers also tell us how many days there are in the month.

TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: This square on the calendar represents today. Today is (day) the (number date) of (month) (year). Can you say the date, too?

STUDENTS DO: Repeat the date.

4. TEACHER SAY: Every day we will do math by moving our bodies. Do you remember the pattern clap from yesterday? A pattern is something that repeats. I am going to clap my hands one time and say the number 1. Watch me and join in when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students follow along.

STUDENTS DO: Join the teacher in the movement and counting pattern.

TEACHER SAY: Great job! Turn to your Shoulder Partner and give them 1 handshake and 1 high-five.

5. TEACHER DO: Model the next movement while explaining to students.

TEACHER SAY: Now, watch this new pattern. First I will clap my hands and say 1. Then I will pat my knees say 2. Join me when you understand the pattern.

TEACHER DO: Continue the pattern multiple times until all students understand and copy the movements and words.

STUDENTS DO: Join the teacher in the movement and counting pattern.

Learn (25-30 mins)

Directions



1. TEACHER SAY: Did you know you can use your fingers to count?

TEACHER DO: Hold up 2 fingers. Use the pointer finger of the other hand to count those 2 fingers.

TEACHER SAY: Now you try it. Hold up two fingers like I did. Point to one finger and say 1. That's it! Now point to the other finger and say 2.

STUDENTS DO: Hold up 2 fingers and count them aloud.

TEACHER SAY: Now hold up 2 fingers and have your Shoulder Partner count them.

STUDENTS DO: Take turns counting 2 fingers of their **Shoulder Partner**.

2. TEACHER SAY: Now let's count to 2. Watch how I do it.

TEACHER DO: Raise one arm in the air and say 1. Then raise the second arm next to the first and say 2.

TEACHER SAY: I have 2 arms raised. Now you try it.

STUDENTS DO: Count to 2 by raising one arm at a time.

3. TEACHER SAY: Now try counting to 2 like this. Watch me, and then follow along.

TEACHER DO: Raise both arms together and say 1. Then lower both arms to tap your knees and say 2. Repeat until all students are joining along with you.

STUDENTS DO: Say 1 when they raise both hands. Say 2 when they lower their arms and tap their knees.

4. TEACHER SAY: Now that I can count to 2, I can count parts of my body.

TEACHER DO: Point to each foot, and count 1, 2.

TEACHER SAY: I would like to have some of your colleagues count their body parts for us. First, think about what body parts you have 2 of.

STUDENTS DO: Think about body parts they have two of for a few seconds.

TEACHER SAY: Now, I will use my Calling Sticks to choose someone to share with the entire class. Everyone has their name written on a Calling Sticks. I wonder who I will choose!

TEACHER DO: Show students your cup that contains your **Calling Sticks**. Choose one stick, and say the name aloud. Ask them to share what they have 2 of. Repeat the process of using the **Calling Sticks** to get four student responses.

STUDENTS DO: Selected students stand up and share what body parts they have 2 of.

5. TEACHER SAY: This is a fun chant. Watch what I do, and repeat each phrase after me.

TEACHER DO: Say, "1, 2, I can count 2."

TEACHER SAY: Now you say it.

STUDENTS DO: Repeat after the teacher.

6. TEACHER DO: Hold up one index finger and say "1." Hold up the index finger from the other hand and say "2, I can count 2."

TEACHER SAY: Now you say it.

STUDENTS DO: Repeat after the teacher.

7. TEACHER DO: Select a student to show how to link arms and say 1, 2, me and you.

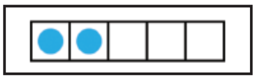
STUDENTS DO: Selected student models with the teacher how to link arms.

TEACHER SAY: Now it will be your turn to do the "1, 2, I can count 2" chant. You will link arms with your Shoulder Partner when it is time to say "1, 2, me and you."

STUDENTS DO: Repeat after the teacher, linking arms with their **Shoulder Partner**s.

8. TEACHER DO: Start at the beginning of the chant and do all the movements with students.

STUDENTS DO: Repeat the chant and movements with the teacher.



9. TEACHER DO: Put up the five frame. Add one more dot in the frame.

TEACHER SAY: Think about how many dots you see.

TEACHER DO: Give students a few seconds to think.

TEACHER SAY: Lean and whisper to your Shoulder Partner how many dots you see.

STUDENTS DO: Tell their **Shoulder Partner** there are 2 dots.

10. TEACHER SAY: Now I will show you how to sky write so that we can write the numbers 1 and 2.

TEACHER DO: Display **Sky Writing** grid.

TEACHER SAY: Do you notice that each line has a special picture for it? Well these lines also have a special name. Point to the very top line that you see with the clouds & sun.

STUDENTS DO: Point to sky line.

TEACHER DO: Point to sky line.

TEACHER SAY: This line is called the "sky line." Can you say sky line?

STUDENTS DO: Say sky line.

TEACHER SAY: That's easy to remember since the sun and clouds are up in the sky! Now, point to the plane.

11. STUDENTS DO: Point to plane line.

TEACHER DO: Point to plane line.

TEACHER SAY: What do you think this line is called? This line is called the "plane line." Can you say plane line?

STUDENTS DO: Say plane line.

TEACHER SAY: While we're pointing to the plane let's make it fly along the plane line.

TEACHER DO: Move finger along the plane line right to left. Make a plane sound if you want.

STUDENTS DO: Copy the teacher's movements (and sounds).

12. TEACHER SAY: Our next line is called the grass line. Can you point to where you think the grass line is?

STUDENTS DO: Point to grass line.

TEACHER DO: Point to grass line.

TEACHER SAY: Yes good job! This is the grass line. Can you say "grass line" with me?

STUDENTS DO: Say grass line with the teacher.

13. TEACHER SAY: And below the grass if you dig in the dirt you may find a worm like this one.

TEACHER DO: Point to worm.

TEACHER SAY: This is the worm line. Can you say "worm line" with me?

STUDENTS DO: Say worm line with the teacher.

14. TEACHER SAY: Now I will demonstrate how I use my arms to sky write.

TEACHER DO: Demonstrate showing straight elbow and moving shoulder with two fingers.

TEACHER SAY: Do you see how I keep my elbow straight? Do you see I have two fingers to point with? Now stand. Make sure you have enough room so we don't sky write on our Shoulder Partners.

STUDENTS DO: Stand and make sure they have room.

TEACHER SAY: We're going to use these two fingers (pointer and middle finger). The trickiest part about Sky Writing is keeping your arm straight. To be good sky writers we can't bend our elbows. We use our shoulders. Show me your straight arm and two fingers.

STUDENTS DO: Stand with their dominant hand straight making sure not to bend at the elbow with two fingers pointed.

TEACHER SAY: When I sky write, I point my fingers at the Sky Writing grid. I use the lines on the grid to help me write correctly. Now you point your Sky Writing fingers at the grid.

STUDENTS DO: Point to the **Sky Writing** grid.

TEACHER DO: Help students who need additional support before moving on.

15. TEACHER SAY: Let's make sure we know which line is which. Point to the sky line. Point to the plane line. Point to the grass line. Point to the worm line. Sky line. Plane line. Grass line. Worm line. Plane line. Worm line. Sky line. Grass line.

STUDENTS DO: Point to the lines as directed.

TEACHER DO: Help students who need additional support before moving on.

16. TEACHER DO: Write the number 1 on the board.

TEACHER SAY: Now we're ready to sky write the number 1.

TEACHER DO: Sky write 1. Use the lines on the **Sky Writing** Grid to explain to students how to write the number 1. For example, "Point with two fingers to the Sky line. We start at the sky line. Now go down to the grass line."

STUDENTS DO: Sky write 1 along with the teacher.

TEACHER DO: Practice **Sky Writing** number 1 with the students. Check to make sure students have the proper form.

TEACHER DO: Write the number 2 on the board.

TEACHER SAY: Wonderful! Now let's try to sky write number 2 together.

TEACHER DO: Sky write 2. Use the lines on the **Sky Writing** Grid to explain to students how to write the number 2.

STUDENTS DO: Sky write 2 along with the teacher.

TEACHER DO: Practice **Sky Writing** number 2 with the students. Check to make sure students have the proper form.

TEACHER SAY: Good job! Give yourselves a pat on the back!

Share (5 mins)

Directions

1. **TEACHER SAY: We have certainly learned a lot during our math time today. At the end of each lesson, you will have time to talk or share about what you learned and to ask questions. Think quietly to yourself, "What did you learn today?"**

TEACHER DO: Provide ample wait time to allow students to reflect upon what they have learned.

STUDENTS DO: Think about what they learned today.

2. **TEACHER SAY: Share something you learned today with your Shoulder Partner.**

TEACHER DO: Allow students time to share.

STUDENTS DO: Share what they learned with their **Shoulder Partner**.

TEACHER SAY: Great job today! Turn to your Shoulder Partner and say, "Great job!"

STUDENTS DO: Say, "Great job!" to their **Shoulder Partners**.

Lesson 3 Overview

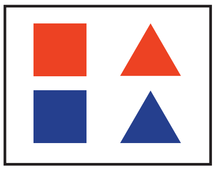
OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date • Count from 1 to 2 • Use manipulatives • Count objects to tell how many there are to the number 2 • Make equivalent sets up to 2 • Sky write numbers 1 to 2	• Calendar • Month • Day • Share • Two	• Gather sets of 2 objects for students to count. (One set per student) Example: beans, dry pasta, stones, buttons, blocks, plastic bottle caps, math counters

MATERIALS

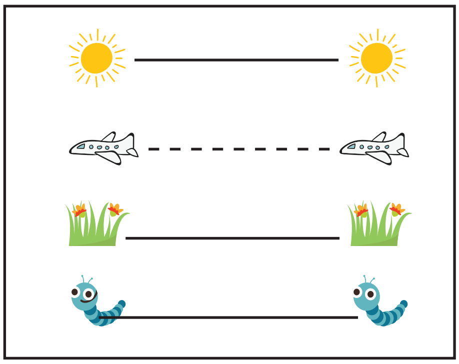
Calendar Math area



Sets of 2 counting objects (one set per student)



Sky Writing Grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: It's Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. It also helps us remember special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: We are in the month of (current month). What month are we in?

STUDENTS DO: Repeat the month.

2. TEACHER SAY: Each square on the calendar represents a day. All of the days in a row make up a week.

TEACHER DO: Point to the days in one week.

TEACHER SAY: Each day in a week has its own name. I will say the name then you repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

STUDENTS DO: Repeat each day of the week after teacher names them.

TEACHER DO: You just named all the days of the week!

3. TEACHER SAY: Look at the numbers on the calendar. Each day has its own number. This tells you the number of days that have happened so far in the month.

TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: This square on the calendar represents today. Today is (day) the (number date) of (month) (year). Can you say the date too?

STUDENTS DO: Repeat the date.

4. TEACHER SAY: Every day we will do math by moving our bodies. Do you remember the pattern clap from yesterday? A pattern is something that repeats. I am going to clap my hands one time and say the number "one." Join me when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students follow along.

STUDENTS DO: Join the teacher in the movement and counting pattern.

TEACHER SAY: Turn to your Shoulder Partner and give them one handshake and one high-five.

5. TEACHER DO: Model the next movement while explaining to students.

TEACHER SAY: Now, watch this new pattern. First I will clap my hands and say 1. Then I will pat my knees and say 2. Watch me and join in when you understand the pattern.

TEACHER DO: Teacher continues the pattern multiple times until all students understand and copy the movements and words.

STUDENTS DO: Join the teacher in the movement and counting pattern.

Learn (25-30 mins)

Directions



1. TEACHER SAY: Did you remember that we can use our fingers to count?

TEACHER DO: Hold up 2 fingers. Use the pointer finger of the other hand to count those two fingers.

TEACHER SAY: Now you try it. Hold up two fingers like I did. Point to one finger and say 1. That's it! Now point to the other finger and say 2.

STUDENTS DO: Hold up 2 fingers and count them aloud.

TEACHER SAY: Now hold up 2 fingers and have your Shoulder Partner count them.

STUDENTS DO: Take turns counting 2 fingers of their **Shoulder Partner**.

2. TEACHER SAY: Now let's count to 2 another way. Watch how I do it.

TEACHER DO: Raise one arm in the air and say 1. Then raise the second arm next to the first and say 2.

TEACHER SAY: I have two arms raised. Now you try it.

STUDENTS DO: Count to 2 by raising one arm at a time.

3. TEACHER SAY: Now try counting to 2 like this. Watch me, and then follow along.

TEACHER DO: Raise both arms together and say 1. Then lower both arms to tap your knees and say 2. Repeat until all students are joining along with you.

STUDENTS DO: Say 1 when they raise both hands. Say 2 when they lower their arms and tap their knees.

TEACHER DO: Practice counting to 2 with students 2-3 more times. Be creative with your counting patterns.

4. TEACHER DO: Write the numbers 1 and 2 on the board (or where all students can see). Display the **Sky Writing** grid.

TEACHER SAY: If you remember Sky Writing the numbers 1 and 2 yesterday, look at me and smile.

STUDENT DO: Smile at the teacher if they remember (note how many remember as an informal assessment)

TEACHER SAY: Today we're going to sky write the numbers 1 & 2 again. Wave your hand if you remember how to use your arm to sky write. Show me your Sky Writing arm.

STUDENTS DO: Wave if they remember. Show their **Sky Writing** arm.

TEACHER DO: Demonstrate showing straight elbow and pointing with two fingers.

TEACHER SAY: Do you remember how I keep my elbow straight? Do you remember I have two fingers to point with? Now stand and remember we don't sky write on our Shoulder Partners so make sure you have enough room.

STUDENTS DO: Stand. Make sure they have space.

TEACHER SAY: We're going to use these two fingers (pointer and middle finger). Remember, to be good sky writers we can't bend our elbows. We keep our arms straight!

STUDENTS DO: Stand with their dominant hand straight making sure not to bend at the elbow with two fingers pointing to the **Sky Writing** grid.

TEACHER DO: Demonstrate a straight elbow and two fingers.

TEACHER SAY: Sky writing arms ready?!?!

5. TEACHER SAY: Let's review the lines on the grid. Point to the sky line. Point to the plane line. Point to the grass line. Point to the worm line. Sky line. Plane line. Grass line. Worm line. Sky line. Grass line. Worm line. Plane line. Worm line. Sky line. Grass line. Plane line.

STUDENTS DO: Point to each line called.

TEACHER DO: Write the number 1 on the **Sky Writing** grid or where all students can see it.

TEACHER SAY: Ok, we are ready! Let's sky write the number 1 together.

TEACHER DO: Sky write the number 1 several times with students. Use the lines on the **Sky Writing** Grid to remind students how to write the number 1. Check to make sure students have the proper form.

STUDENTS DO: Sky write number 1 with the teacher.

6. TEACHER SAY: Let's sky write number 2 together.

TEACHER DO: Sky write the number 2 several times with students. Use the lines on the **Sky Writing**

Grid to remind students how to write the number 2. Check to make sure students have the proper form.

STUDENTS DO: Sky write number 2 with the teacher.

TEACHER SAY: Wonderful Sky Writing! Tomorrow we are going to learn a new number!

Note for the Teacher: Give students time to play with any new manipulatives before they use it for learning purposes. This helps them satisfy their curiosity so they'll focused and won't play with them while you are trying to teach. If students do play with the manipulatives too much while you are teaching, gently remind them their exploration time is over.

7. TEACHER SAY: I have some objects that we will use during math time to help us count.

TEACHER DO: Show manipulatives (counters).

TEACHER SAY: You will use these objects to help you count. These are math tools, not toys, so I want to make sure that you use them properly. If you do not use them properly, I will take them away. Who can repeat what I just said?

STUDENTS DO: Raise hands to volunteer. Selected student will repeat what the teacher said.

TEACHER SAY: Good. Now, let's see if you know what to do and what not to do with our math tools. Should I take them home? Should I count them? Should I throw them? Should I share them with my Shoulder Partner sometimes? Should I stick it in my mouth, ear, or nose?

STUDENTS DO: Call out answers to the teacher's questions.

TEACHER SAY: Excellent! Before we use them to count, I will give you some time to explore one of the objects we will use today. Touch it, look at it, observe it, study it. When explore time is over, we will stop exploring and begin using the objects as math tools.

TEACHER DO: Hand out objects. Give students 3 minutes to explore.

STUDENTS DO: Examine objects. Talk to classmates about them.

8. TEACHER SAY: How many objects do you have?

STUDENTS DO: Call out 1.

TEACHER SAY: Yes we all have 1. I will give you 1 more.

TEACHER DO: Hand out a second object to each student.

TEACHER SAY: Think in our brain and do not say what you are thinking: How many objects do you have? Lean and whisper to your Shoulder Partner.

STUDENTS DO: Lean and whisper 2 to **Shoulder Partner**.

TEACHER SAY: Now watch me count mine. 1, 2. I have 2. Did you see me touch each object while I counted? Now let's count them together. 1, 2. We all have 2. We have the same amount! You did a great job using math tools today! We will use them again another day.

TEACHER DO: Collect all objects and store for later use.

Share (5 mins)

Directions

1. TEACHER SAY: We have certainly learned a lot during our math time today. Now it's time to talk about what you learned and to ask questions. But first, think quietly to yourself, "What did I learn today?"

TEACHER DO: Provide ample wait time, to allow students to reflect upon what they have learned.

2. TEACHER SAY: When I say go, but not until I say go, you will Turn and Talk to your Shoulder Partner. Tell them something you learned today or a question you have. I will walk around and collect your objects and listen to what you talk about.

TEACHER DO: Allow students about 1 minute to share. Walk around the classroom and monitor students' conversations. Collect objects. Then, get students' attention.

TEACHER DO: Get students' attention.

TEACHER SAY: You have worked hard on math. I am proud of you. Give yourself two pats on the back.

STUDENTS DO: Reach up and pat their back two times.

Lesson 4 Overview

OUTCOMES

Students will:
- Identify the month, day, and date.
- Count from 1 to 3.
- Count objects to tell how many there are to the number 3.
- Sky write numbers 1 to 3

STUDENT VOCABULARY:

- Calendar
- Month
- Day
- Share
- Three

LESSON PREPARATION FOR THE TEACHER

Gather sets of 3 objects for students to count. (One set per pair of students) Example: beans, dry pasta, stones, buttons, blocks, plastic bottle caps, math counters

MATERIALS

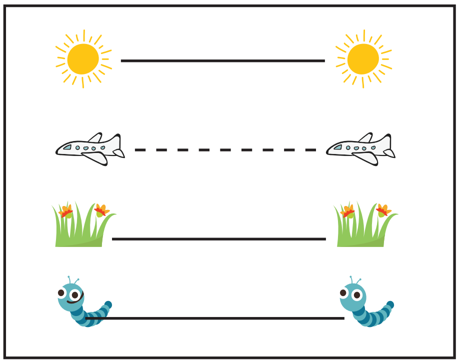
Calendar Math area



Bags or cups of 3 counting objects (one set per pair of students)



Sky Writing Grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: It's Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. It also helps us remember special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: We are in the month of (current month). What month are we in?

STUDENTS DO: Repeat the month.

2. TEACHER SAY: Each square on the calendar represents a day. All of the days in a row make up a week.

TEACHER DO: Point to the days in one week.

TEACHER SAY: Each day in a week has its own name. I will say the name then you repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

STUDENTS DO: Repeat each day of the week after teacher names them.

TEACHER SAY: You just named all the days in a week!

3. TEACHER SAY: Look at the numbers on the calendar. Each day has its own number. This tells you the number of days that have happened so far in the month.

TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: This square on the calendar represents today. Today is (day) the (number date) of (month) (year). Can you say the date too?

STUDENTS DO: Repeat the date.

4. TEACHER SAY: Are you ready to do Movement Math? Remember, a pattern is something that repeats. I will clap my hands and say 1 and pat my legs and say 2. I will repeat that pattern. Watch me and join in when you are ready.

TEACHER DO: Repeat the pattern multiple times until all students follow along.

STUDENTS DO: Join the teacher in the movement and counting pattern.

TEACHER SAY: Turn to your Shoulder Partner and give them one handshake and two high-fives.

Learn (25-30 mins)

Directions

1. TEACHER SAY: Yesterday, we practiced counting to 2 on our fingers and with objects. Today, we are learning a new number!

TEACHER DO: Call 3 students to the front of the room.

TEACHER SAY: Watch as I count your colleagues.

TEACHER DO: Count the students aloud as you hold your hand above each one's head.

STUDENTS DO: Observe as the teacher counts aloud.

TEACHER SAY: I am going to count again. This time, you count with me.

STUDENTS DO: Count aloud along with the teacher.

TEACHER DO: Have students return to their seats.

2. TEACHER SAY: Did you remember that we can use our fingers to count?



TEACHER DO: Hold up three fingers. Use the pointer finger of the other hand to count those two fingers.

TEACHER SAY: Now you try it. Hold up three fingers like I did. Point to one finger and say 1. That's it! Now point to the next finger and say 2. Great! Now points to the last finger and say 3.

STUDENTS DO: Hold up three fingers and count them aloud.

TEACHER SAY: Now hold up three fingers and have your Shoulder Partner count them.

STUDENTS DO: Students will take turns counting three fingers of their **Shoulder Partner**.

3. TEACHER SAY: I will bring you and your Shoulder Partner a counting bag. Inside the bag are small objects. Do not open them until I tell you to.

TEACHER DO: Hand out counting bags so that each pair receives one counting bag that contains 3 beans (or other small object).

TEACHER SAY: Take out the objects. Work with your partner to line up the beans like this.



TEACHER DO: Draw the beans in a horizontal line on the chalkboard (or somewhere all students can see.)

STUDENTS DO: Take out the beans and line them up horizontally.

TEACHER SAY: Now count the beans with your Shoulder Partner.

STUDENTS DO: Count beans with **Shoulder Partners**.

TEACHER SAY: How many beans did you and your partner count?

STUDENTS DO: Raise hands to volunteer. Selected pair answers the question.



4. TEACHER SAY: Pick up your beans and line them up like this.

TEACHER DO: Draw the beans in a vertical line on the chalkboard (or somewhere all students can see.)

STUDENTS DO: Take out the beans and line them up vertically.

TEACHER SAY: Now count the beans again with your Shoulder Partner.

STUDENTS DO: Count beans with **Shoulder Partners**.

TEACHER SAY: How many beans did you and your partner count this time?

STUDENTS DO: Raise hands to volunteer. Selected pair answers the question.

TEACHER SAY: When you line up your beans in a different way, does it change the number of beans you have? How do you know?

STUDENTS DO: Raise hands to volunteer. Selected students explain that rearranging the beans does not change the number of beans. They know because they counted.

TEACHER SAY: Great work! Tomorrow, we will practice counting up to 3 again.

5. TEACHER DO: Display **Sky Writing** grid. Write numbers 1 and 2 on the board.

TEACHER SAY: Do you remember your Sky Writing lines? Stand and practice. Point to the sky line. Point to the plane line. Point to the grass line. Point to the worm line.

STUDENTS DO: Stand and practice identifying the lines on the grid.

TEACHER DO: Praise students who are modeling proper form. Correct those who are not.

TEACHER SAY: Let's sky write the number 1. Write with me.

TEACHER DO: Sky write the number 1.

STUDENTS DO: Sky write the number 1 with the teacher.

TEACHER SAY: Let's sky write the number 2. Write with me.

TEACHER DO: Sky write the number 2.

STUDENTS DO: Sky write the number 2 with the teacher.

TEACHER DO: Write the number 3 on the chalkboard.

TEACHER SAY: **Now we will learn to sky write the number 3.**

TEACHER DO: Sky write the number 3 several times with students. Use the lines on the **Sky Writing** Grid to explain how to write the number 3. Check to make sure students have the proper form.

STUDENTS DO: Sky write the number 3 with the teacher.

TEACHER SAY: **Good job! Give your partner a high five!**

Share (5 mins)

Directions

1. TEACHER SAY: **We have certainly learned a lot during our math time today. Now it's time to talk or share about what you learned and to ask questions. But first, think quietly to yourself, "What did I learn today?"**

TEACHER DO: Provide students about 30 seconds to reflect upon what they have learned.

2. TEACHER SAY: **Share something you learned today or a question you have with your Shoulder Partner.**

STUDENTS DO: Share their learning with their **Shoulder Partner**s.

TEACHER SAY: **You have worked hard on math today. I am proud of you. Give your brain three pats on your head.**

STUDENTS DO: Pat their head three times.

Lesson 5 Overview

OUTCOMES

Students will:
- Identify the month, day, and date
- Count from 1 to 3
- Sky write numbers 1 to 3
- Draw circles

STUDENT VOCABULARY:

- Calendar
- Month
- Day
- Five frame
- Circle

LESSON PREPARATION FOR THE TEACHER

- Have five frame with two dots ready from Day 3.
- Have 1 more dot to add.
- Have available the sets of counting objects from the previous day.
- Draw 3 circles on the first page in each student's math journal.
- Have sets of 3 counting objects from previous lesson (one set per pair of students).
- Cut out a large circle (about 25 cm across). Keep for future lessons.

MATERIALS

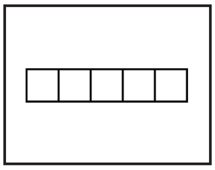
Calendar Math area



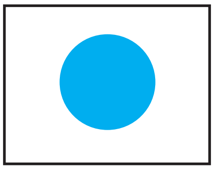
Bags or cups of 3 counting objects (one set per pair of students)



Five Frame (from previous lesson)



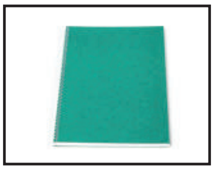
1 dot



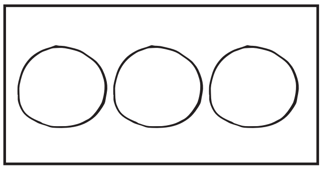
Tape or glue stick



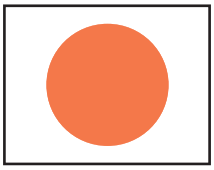
Math Journals and pencil



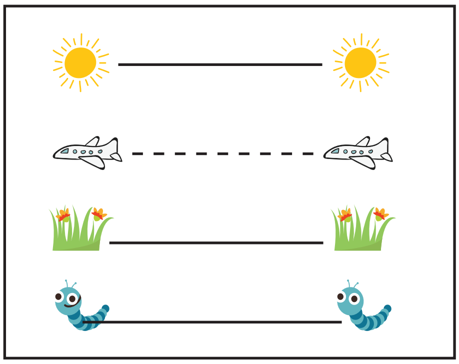
Draw 3 circles in each math journal.



Large circle



Sky Writing Grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: It's Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. It also helps us remember special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: We are in the month of (current month). What month are we in?

STUDENTS DO: Repeat the month.

2. TEACHER SAY: Each square on the calendar represents a day. All of the days in a row make up a week.

TEACHER DO: Point to the days in one week.

TEACHER SAY: Each day in a week has its own name. I will say the name then you repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

STUDENTS DO: Repeat each day of the week after teacher names them.

TEACHER SAY: Great job!

3. TEACHER SAY: Look at the numbers on the calendar. Each day has its own number. This tells you the number of days that have happened so far in the month.

TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: This square on the calendar represents today. Today is (day) the (number date) of (month) (year). Can you say the date too?

STUDENTS DO: Repeat the date.

4. TEACHER SAY: Are you ready to do Movement Math? Remember, a pattern is something that repeats. I will clap my hands 3 times and say the numbers 1, 2, 3 for each clap. Next, I will clap my knees three 3 and count 1, 2, 3 for each clap. Watch me and join in when you are ready.

TEACHER DO: Repeat the pattern multiple times until all students follow along.

STUDENTS DO: Join the teacher in the movement and counting pattern.

TEACHER SAY: Turn to your Shoulder Partner and give them 1 handshake, 2 pats on the back, and 3 high-fives.

Learn (25-30 mins)

Directions

1. TEACHER SAY: Yesterday we learned the number 3. Let's look at 3 a different way.

TEACHER DO: Put up the five frame. Add one more dot in the frame.

TEACHER SAY: Think about how many dots you see.

TEACHER DO: Give students a few seconds to think.

TEACHER SAY: **Lean and whisper to your Shoulder Partner how many dots you see.**

STUDENTS DO: Tell their **Shoulder Partner** there are 3 dots.

2. TEACHER DO: Display **Sky Writing** grid. Write numbers 1, 2, and 3 on the board.

TEACHER SAY: **Do you remember your Sky Writing lines? Point to the sky line. Point to the plane line. Point to the grass line. Point to the worm line.**

STUDENTS DO: Review **Sky Writing** grid lines with the teacher.

TEACHER SAY: **Now stand up and show me your Sky Writing arm.**

STUDENTS DO: Stand up and demonstrate proper **Sky Writing** arm.

TEACHER DO: Praise students who are demonstrating proper **Sky Writing** arm. Correct students who are not.

3. TEACHER SAY: **Let's sky write the number 1 together.**

TEACHER DO: Sky write the number 1.

STUDENTS DO: Sky write the number 1 with the teacher.

TEACHER SAY: **Great work! Let's sky write the number 2 together.**

TEACHER DO: Sky write the number 2.

STUDENTS DO: Sky write the number 2 with the teacher.

TEACHER SAY: **Excellent! Now let's sky write the number 3 together.**

TEACHER DO: Sky write the number 3. Use the grid lines to review how to write it.

STUDENTS DO: Sky write the number 3 with the teacher.

TEACHER SAY: **Fantastic job! Have a seat.**

4. TEACHER DO: Display the large circle you prepared.

TEACHER SAY: **Does anyone know what shape this is?**

STUDENTS DO: Raise hands to volunteer. Selected students answer the question.

TEACHER DO: If necessary, tell students that the shape is a circle.

TEACHER SAY: **A circle is a round shape made out of one line. Watch as I trace the circle with my finger.**

TEACHER DO: Trace circle in the air with pointer finger.

STUDENTS DO: Observe the teacher.

TEACHER SAY: **Now, you trace it in the air with your finger.**

STUDENTS DO: Trace circle in the air with finger.

TEACHER SAY: **Wonderful! You are so fabulous at making circles! Can you put your pointer finger in the air and make another circle?**

STUDENTS DO: Trace circle in the air with pointer finger.

TEACHER SAY: **Now, can you put your pointer finger in the air and make a small circle?**

STUDENTS DO: Trace small circle in the air with pointer finger.

TEACHER SAY: Now, can you put your pointer finger in the air and make a huge circle?

STUDENTS DO: Trace huge circle in the air with pointer finger.

TEACHER SAY: Wow! Nice circles. Now turn to your Shoulder Partner and smile as you circle your face.

STUDENTS DO: Smile at **Shoulder Partner**, circle their face with pointer finger.

5. TEACHER SAY: You will now have a chance to practice drawing circles. I am going to give each of you a math journal. Sometimes we will use a math journal to write down or draw our thinking about math.

TEACHER DO: Hand out the math journals to students, saving one for yourself. Hold up a math journal. Turn to the first page where you drew the circles. Tell students to turn to the next blank page in their journals.

STUDENTS DO: Students open to the first page of their journal.

6. TEACHER SAY: You are going to practice drawing circles now! Just like we did in the air, I want you to draw a circle with your finger in your math journal. Your circle will be smaller than my circle. Now, pick up your pencil and draw a circle. It is okay if it is not perfect. We're just learning and practicing!

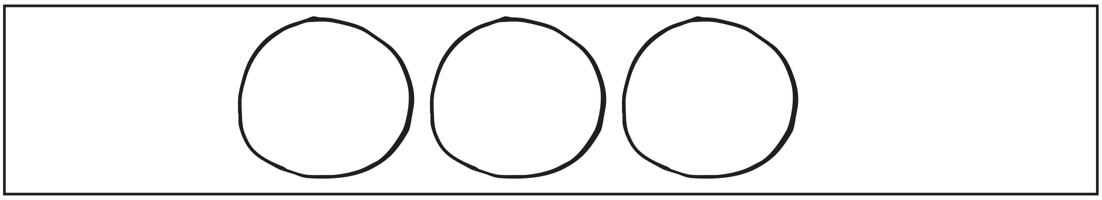
STUDENTS DO: Draw a circle in their math journal.

TEACHER DO: Walk around the room to assist students drawing circles. Take note of students who may need additional instruction.

TEACHER SAY: Everyone hold up your math journals and show your work to your colleagues.

STUDENTS DO: Stand up and show their math journals to their colleagues.

7. TEACHER SAY: I have drawn 3 circles on the first page. Let's use the 3 circles in our math journals to practice counting to 3. Find the page with 3 circles. You can put your pencil away because we won't need it.



STUDENTS DO: Find the 3 circles and put pencil away.

TEACHER DO: Hand out bags (or cups) of beans to pairs of students.

TEACHER SAY: Remember that these are math tools, not toys. We will use them to help us practice counting. Take the beans out and put them on your table.

STUDENTS DO: Take beans out and put them on the table.

TEACHER SAY: You will take turns counting the beans. It does not matter who goes first because each of you will get a turn. One of you take the beans and put one bean in each circle in your partner's math journal.



STUDENTS DO: Place one bean in each circle in their partner's journals.

8. TEACHER SAY: Count the beans with your partner. How many do you have?

STUDENTS DO: Count the beans with their partners. Say 3 when called on by the teacher.

TEACHER SAY: Good work! Now it's your partner's turn. Pick up the beans and put one bean in each circle in your partner's math journal.

STUDENTS DO: Place one bean in each circle in their partner's journals.

9. TEACHER SAY: Count the beans with your partner. How many do you have?

STUDENTS DO: Count the beans with their partners. Say 3 when called on by the teacher.

TEACHER SAY: You are getting so great at counting! And you did a great job drawing circles. We will keep practicing that, too, so don't worry if your circles weren't perfect.

TEACHER DO: Collect counting objects and store for use another day.

Share (5 mins)

Directions

1. TEACHER SAY: We have certainly learned a lot during our math time today. Now it's time to talk or share about what you learned and to ask questions. But first, think quietly to yourself, "What did I learn today?"

TEACHER DO: Provide students about 30 seconds to reflect upon what they have learned.

2. TEACHER SAY: Share something you learned today or a question you have with your Shoulder Partner.

STUDENTS DO: Share their learning with their **Shoulder Partner**s.

TEACHER SAY: Students, you have worked hard on math today. I am proud of you. Give yourself three pats on your back.

STUDENTS DO: Pat their back three times.

Lesson 6 Overview

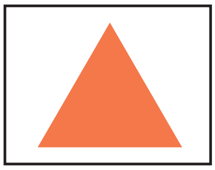
OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date • Count from 1 to 3 • Sky write numbers 1 to 3 • Identify and count sides and corners of a triangle • Draw triangles	• Calendar • Month • Day • Triangle • Sides • Corners	• Cut out a large triangle (sides about 25 cm x 25 cm). Keep for future lessons.

MATERIALS

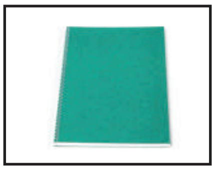
Calendar Math area



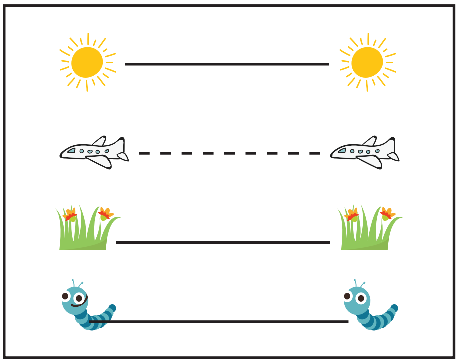
Large triangle



Math journal and pencil



Sky Writing Grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: It's Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. It also helps us remember special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: We are in the month of (current month). What month are we in?

STUDENTS DO: Repeat the month.

2. TEACHER SAY: Each square on the calendar represents a day. All of the days in a row make up a week.

TEACHER DO: Point to the days in one week.

TEACHER SAY: **Each day in a week has its own name. I will say the name then you repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.**

STUDENTS DO: Repeat each day of the week after teacher names them.

TEACHER SAY: **Now I will say all of the days of the week again, but I will stop before I am done. All of you tell me which day comes next. Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, ______________.**

STUDENTS DO: Say Saturday together.

3. TEACHER SAY: **Look at the numbers on the calendar. Each day has its own number. This tells you the number of days that have happened so far in the month.**

TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: **This square on the calendar represents today. Today is (day) the (number date) of (month) (year). Can you say the date too?**

STUDENTS DO: Repeat the date.

4. TEACHER SAY: **Are you ready to do Movement Math? Today we are going to play the Jump Up game. We are going to squat down and count to 3. We will stay down for 1 and 2 and when we get to 3, we will jump up and shout 3. Let's play!**

TEACHER DO: Squat down and count to 3, jumping up when you get to 3.

STUDENTS DO: Play the Jump Up game with the teacher.

TEACHER SAY: **Super! We will play that again another day.**

Learn (25-30 mins)

Directions

1. TEACHER SAY: **We have been learning to count 1, 2, and 3. Let's count 3 fingers on one of our hands. Please count your fingers as I count mine.**

TEACHER DO: Hold up 3 fingers on one hand. Use the other hand to count your fingers.

STUDENTS DO: Hold up one hand with three fingers up. Point to each finger using their other hand and count 1, 2, 3.

2. TEACHER SAY: **Let's play a game. It is called 1, 2, 3, Move. Count with me from 1 to 3. After we say the number 3, we all touch the floor. Let's try it!**

TEACHER DO: Count 1, 2, 3, and then touch the floor.

STUDENTS DO: Join teacher in counting 1, 2, 3, and then touching the floor.

TEACHER SAY: **Count with me again and after we say the number 3 this time we will pretend to snore. Ready?**

TEACHER DO: Count 1, 2, 3, and then pretend to snore.

STUDENTS DO: Join teacher in counting 1, 2, 3, and then pretending to snore.

TEACHER SAY: **Let's play one more time. This time, count with me and after we say the number 3, we will roar like a lion. Ready?**

TEACHER DO: Count 1, 2, 3, and then roar.

STUDENTS DO: Join teacher in counting 1, 2, 3, and then roaring.

3. **TEACHER SAY: Yesterday, we talked about circles and practiced drawing them. Today, we're going to talk about a new shape. It is called a triangle.**

TEACHER DO: Display large triangle.

TEACHER SAY: This is a triangle. Everyone say "triangle" with me.

STUDENTS DO: Say triangle with the teacher.

4. **TEACHER DO:** Point to the sides of the triangle.

TEACHER SAY: These are the sides of the triangle. How many sides does a triangle have? Let's count them together.

TEACHER DO: Point to the sides of the triangle and count them aloud.

STUDENTS DO: Count aloud with the teacher.

5. **TEACHER DO:** Point to the corners of the triangle.

TEACHER SAY: These are the corners of the triangle. How many corners does a triangle have? Let's count them together.

TEACHER DO: Point to the corners of the triangle and count them aloud.

STUDENTS DO: Count aloud with the teacher.

6. **TEACHER SAY: Very good! A triangle has 3 sides. It also has 3 corners. This shape is special to us because we have been learning how to count to and write the number 3. We're going to practice drawing triangles. First, watch me.**

TEACHER DO: Draw triangles on the chalkboard, explaining to students what you are doing as you draw.

STUDENTS DO: Observe as the teacher draws triangles.

7. **TEACHER SAY: Now let's sky write triangles together. Let's count the sides as we draw them in the air. Stand up and raise your Sky Writing arm and point your fingers.**

STUDENTS DO: Stand and prepare to sky write triangles.

TEACHER DO: Demonstrate how to sky write triangles, counting each side aloud.

STUDENTS DO: Sky write triangles along with the teacher, counting each side aloud.

TEACHER SAY: Great job! Let's practice drawing triangles in our math journals.

8. **TEACHER DO:** Hand out math journals. Open your math journal to the first blank page and hold it up for students to see.

TEACHER SAY: Open your math journals to the first blank page.

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: What shape did we practice drawing in our journals yesterday?

STUDENTS DO: Call out the answer together – circles.

TEACHER SAY: How many sides does a triangle have?

STUDENTS DO: Call out the answer together – 3.

9. TEACHER SAY: Great! Draw 3 triangles in your math journal. Remember, we are just learning and it is okay if they are not perfect. We will keep practicing.

STUDENTS DO: Draw 3 triangles in their math journals.

TEACHER DO: Walk around the room, monitoring students' work and offering help as needed. Take note of students who may need additional instruction.

TEACHER SAY: Look at your 3 triangles. Which one is your favorite one you drew? Color it in with your pencil.

STUDENTS DO: Color in their favorite triangles in their math journals.

TEACHER SAY: You did a wonderful job! We will continue to practicing counting and drawing shapes.

TEACHER DO: Collect math journals.

Share (5 mins)

Directions

1. TEACHER SAY: It's the end of our lesson! That means you get to share what you have learned with one another. What was the new shape you learned today? When I say go, and not until I say go, you will Turn and Talk to your Shoulder Partner about what you remember about it. Where have you seen this shape before? Go!

STUDENTS DO: Talk to partners about where they have seen triangles before.

TEACHER SAY: Raise your hand if you'd like to share where you've seen triangles before.

STUDENTS DO: Selected students share where they have seen triangles before.

Lesson 7 Overview

OUTCOMES

Students will:
- Identify the month, day, and date
- Count from 1 to 4
- Use a five frame to recognize quantities 1-4
- Identify and count sides and corners of a square
- Draw squares

STUDENT VOCABULARY:

- Calendar
- Corners
- Day
- Five frame
- Sides
- Month
- Square

LESSON PREPARATION FOR THE TEACHER

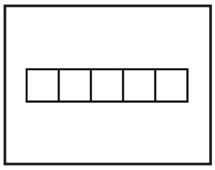
- Draw 4 squares in each journal.
- Cut out a large square (about 25 cm x 25 cm). Keep for future lessons.
- Gather sets of 4 objects for students to count. (One set per pair of students) Example: beans, dry pasta, stones, buttons, blocks, plastic bottle caps, math counters

MATERIALS

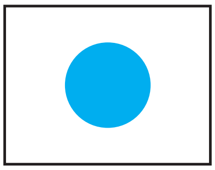
Calendar Math Area



Five Frame (from previous lesson)



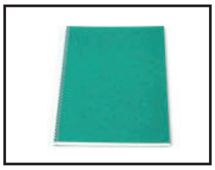
1 dot



Tape or glue stick



Math journal & pencil



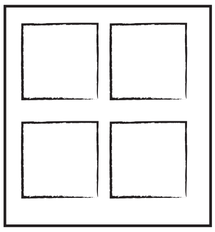
Bags or cups containing 4 sets counting objects (one set per pair of students)



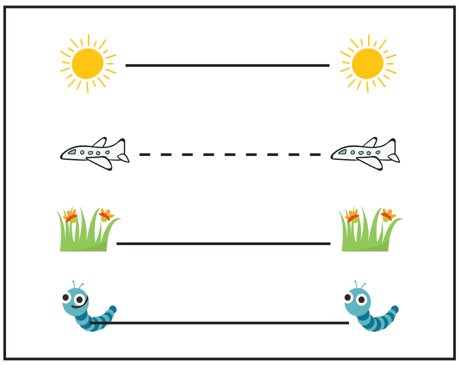
Large square



4 squares in each math journal



Sky writing grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: **It's Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. It also helps us remember special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.**

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: **We are in the month of (current month).What month are we in?**

STUDENTS DO: Repeat the month.

2. TEACHER SAY: **Each square on the calendar represents a day. All of the days in a row make up a week.**

TEACHER DO: Point to the days in one week.

TEACHER SAY: **Each day in a week has its own name. I will say the name then you repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday. You just named all the days in a week!**

STUDENTS DO: Repeat each day of the week after teacher names them.

TEACHER SAY: **Now I will say all of the days of the week again, but I will pause so you can tell what day comes next. Let's go: Sunday, Monday, Tuesday, Wednesday, __________, Friday, Saturday.**

STUDENTS DO: Say Thursday together.

3. TEACHER SAY: **Nice job! Look at the numbers on the calendar. Each day has its own number. This tells you the number of days that have happened so far in the month.**

TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: **What does this square on the calendar represent?**

STUDENTS DO: Say today together.

TEACHER SAY: **Yes indeed. Today is (day) the (number date) of (month) (year). Students, can you say the date too?**

STUDENTS DO: Repeat the date.

4. TEACHER SAY: **Are you ready to do Movement Math? We have been learning to count to 3. Today, I will clap my hands three times while counting 1, 2, 3 then I will pause and repeat. Join me.**

TEACHER DO: Repeat the pattern until all students understand and mimic the movement and counting.

STUDENTS DO: Watch the teacher do the pattern, then join in.

TEACHER SAY: **Next, watch as I add to this pattern. I still clap three times while counting 1, 2, 3 then I clap my knees once while counting 1. Watch me and join in when you know the pattern.**

TEACHER DO: Repeat the pattern until all students understand and mimic the movement and counting.

STUDENTS DO: Watch the teacher do the pattern, then join in.

TEACHER SAY: Turn to your Shoulder Partner and give them 1 handshake, 2 high-fives, and 3 pats on the back.

STUDENTS DO: Turn to partner and give them 1 handshake, 2 high-fives, and 3 pats on the back.

Learn (25-30 mins)

Directions

1. TEACHER SAY: So far, we know how to count 1, 2, 3. Does anyone know what the next number is? It is 4! Let's use our five frame to see how many 4 is.

TEACHER DO: Put up the five frame. Add one more dot in the frame.

TEACHER SAY: Now let's count them together. I will point to each dot and count.

TEACHER DO: Point to each dot on the five frame and count aloud.

STUDENTS DO: Count aloud from 1 to 4 with the teacher.



2. TEACHER SAY: Let's count 4 fingers on one of our hands. Count your fingers as I count mine. Can you hold up 4 fingers like this?

STUDENTS DO: Hold up 4 fingers on one hand.

TEACHER SAY: Let's count to 4 on our fingers.

TEACHER DO: Show students how to use the pointer finger from one hand to count 4 fingers on their other hand.

STUDENTS DO: Hold up a hand with four fingers up. Point to each finger using the other hand.

TEACHER SAY: Good job! Let's count to 4 in a really different way!

3. TEACHER DO: Introduce a new shape: a square.

TEACHER SAY: We have talked about circles and triangles so far. Today, we're going to talk about another new shape. It is called a square.

TEACHER DO: Draw a square on the chalkboard (or somewhere all students can see it).

TEACHER SAY: This is a square. Everyone say "square" with me.

STUDENTS DO: Say square with the teacher.

4. TEACHER DO: Point to the sides of the square.

TEACHER SAY: These are the sides of the square. How many sides does a square have? Let's count them together.

TEACHER DO: Point to the sides of the square and count them aloud.

STUDENTS DO: Count aloud with the teacher.

5. TEACHER DO: Point to the corners of the square.

TEACHER SAY: These are the corners of the square. How many corners does a square have? Let's count them together.

TEACHER DO: Point to the corners of the square and count them aloud.

STUDENTS DO: Count aloud with the teacher.

6. TEACHER SAY: Very good! A square has 4 sides. It also has 4 corners. This shape is special to us because we have been learning how to count to and write the number 4. We're going to practice drawing squares. First, watch me.

TEACHER DO: Draw squares on the chalkboard, explaining to students what you are doing as you draw.

TEACHER SAY: The trick is to try and make all your lines the same size. Start at the bottom and drawn a line straight up. Then draw another line straight across the top. Then, go straight down. Remember that the line will be the same size as your first line. Now connect the last two with a straight line going across.

STUDENTS DO: Observe as the teacher draws squares.

7. TEACHER SAY: Now let's sky write squares together. Let's count the sides as we draw them in the air. Stand up and raise your Sky Writing arm and point your fingers.

STUDENTS DO: Stand and prepare to sky write squares.

TEACHER DO: Demonstrate how to sky write squares, counting each side aloud.

STUDENTS DO: Sky write squares along with the teacher, counting each side aloud.

TEACHER SAY: Now try to Sky Write a square around my head.

STUDENTS DO: Students hold out their finger to practice making a square in the air.

TEACHER SAY: Nice! Now try to make a square around the ____ (name an object visible to all students).

STUDENTS DO: Hold out their fingers to practice making a square in the air.

8. TEACHER SAY: Great job! Now we will practice tracing then drawing squares in our math journal.

TEACHER DO: Hand out the math journals save one for yourself.

TEACHER SAY: Remember, we use our math journals to write down or draw our thinking about math.

TEACHER DO: Hold up a math journal. Turn to the next blank page.

TEACHER SAY: Turn to the next blank page. I'd like you to try to draw a square with your finger first. Your square will be smaller than my square. Use your finger to trace a square.

STUDENTS DO: Trace a square with their fingers on the next blank page in their math journals.

TEACHER SAY: Now pick up your pencil and draw a square.

STUDENTS DO: Draw a square with a pencil.

TEACHER SAY: Now count how many sides your square has.

STUDENTS DO: Count the sides of the square.

TEACHER SAY: How many sides does your square have?

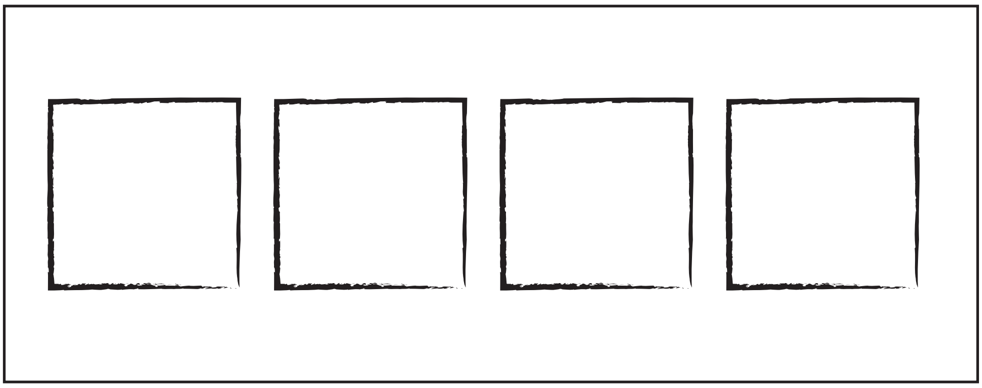
STUDENTS DO: Respond together: 4.

TEACHER SAY: Wonderful counting! Tell yourself "nice square." Turn to your Shoulder

Partner and count their sides. Tell them "nice square"

STUDENTS DO: Count their **Shoulder Partner**'s sides and compliment them.

9. TEACHER SAY: I have drawn four squares in your math journal. Please turn to that page. If you need helping finding it raise your hand. Remember the counting bags from before? We are going to use them again. Please do not open your bags until I tell you to. We won't need a pencil for this so you can put your pencil away.



STUDENTS DO: Put pencil away.

TEACHER DO: Hand out one counting bag to each pair of students.

TEACHER SAY: You will take turns counting what is in the bag I give you. The student who has longer hair (or choose another characteristic) will go first.
Put one ______(object name) in each of the square in your math journal and count as you place them.
How many _________ (object name) will you put in each square?



STUDENTS DO: Respond together: 1.

10. TEACHER SAY: Your partner will listen to you count as you place one______(object name) in each square. You can help each other.

TEACHER DO: Walk around the room to assist students who may need help counting their items. Once they have all finished counting their objects:

TEACHER SAY: When you are done counting, pass the ______(object name) to your partner and watch as they count.
Your partner will also put one ______(object name) in each of the squares in your math journal. Count aloud as you work. You can help each other.

STUDENTS DO: The other partner takes their turn to count the objects.

11. TEACHER DO: Give students directions on how they will clean up their materials.

TEACHER SAY: Great job counting today! Put the _____(object name) back in the bag and close your math journals. Place your math journals in the ______ (location where they will be stored)

Share (5 mins)

Directions

1. TEACHER SAY: It's Sharing time! What number did you sky write today?

STUDENTS DO: Respond together: 4.

2. TEACHER SAY: What was the new shape you learned today? When I say go, and not until I say go, you will Turn and Talk to your Shoulder Partner about what you remember about it. Where have you seen this shape before? Go!

STUDENTS DO: Talk to partners about where they have seen squares before.

TEACHER DO: Give **Attention Getting Signal**.

3. TEACHER SAY: We also learned how to use our fingers to count to 4. Show me 4 fingers.

STUDENTS DO: Hold up 4 fingers.

TEACHER SAY: Great job! Now go ahead and give your partner a high-4. Yes you heard that right: Instead of giving them your whole hand, give them 4 fingers because we're so excited we mastered 4!

STUDENT DO: Hold up 4 fingers and touch the tips of **Shoulder Partner**'s 4 fingers.

Lesson 8 Overview

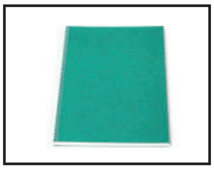
OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date • Count from 1 to 4 • Sky write number 4 • Use dot cards to recognize quantities 1-4 • Draw circles, triangles, and squares	• Calendar • Month • Day • Dot cards • Circle • Triangle • Square	Create (or have available) a large set of dot cards as described in Term 1 Preparation for the Teacher. For this lesson, you will need cards 1-4.

MATERIALS

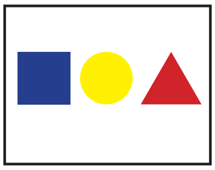
Calendar Math Area



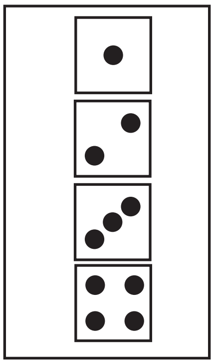
Math journal & pencil



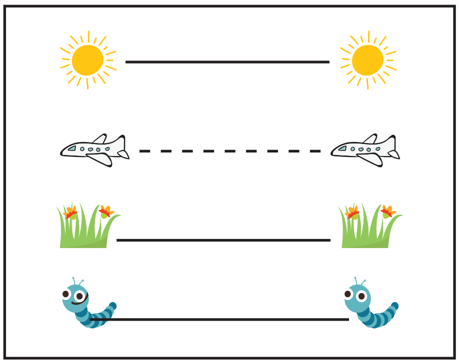
Large square, triangle, and circle



Large Dot Cards 1-4 (Teacher set) (See Term 1 Preparation for the Teacher for instructions and examples.)



Sky writing grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: **It's Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year such as your birthday and special holidays.**

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: **Who remembers what month we are in? Can you whisper it in your hand?**

STUDENTS DO: Say month by whispering it into their hands.

TEACHER SAY: **Now say it aloud together!**

STUDENTS DO: Say (name of month) aloud.

2. TEACHER DO: Point to each day of the week as you name them. Allow time for student repetition.

STUDENTS DO: Repeat the days of the week after the teacher.

TEACHER SAY: **Remember, each square on the calendar represents a day. All of the days in a row make up a week.**

TEACHER DO: Point to the days in one week.

TEACHER SAY: **I will say the name then you repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.**

STUDENTS DO: Repeat the days of the week one at a time.

TEACHER SAY: **Now I will say all of the days of the week all together. Can you say them with me? Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.**

STUDENTS DO: Say days of the week together.

TEACHER SAY: **Now I will shout all of the days of the week. Can you shout them with me? Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.**

STUDENTS DO: Shout days of the week together.

TEACHER SAY: **(in a whisper voice) Good job! Now I will whisper all of the days of the week. Can you whisper them with me? Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday**

STUDENTS DO: Whisper days of the week together.

TEACHER SAY: **This square on the calendar represents today. Today is (day) the (number date) of (month) (year). Students can you say the date too?**

STUDENTS DO: Repeat the date.

3. TEACHER DO: Gather dot cards 1-3 for this section and dot card 4 for the next section.

TEACHER SAY: **Are you ready to do Movement Math? Today I am going to show you my dot cards one at a time. I want you to clap the number of dots you see. For example, if I hold up the dot card with one dot, you will clap one time.**

TEACHER DO: Demonstrate showing the one dot and clapping once.

TEACHER SAY: **Let's try it!**

TEACHER DO: Hold up the dot card with two dots.

STUDENTS DO: Clap two times.

TEACHER DO: Repeat using a different dot card, pausing for students to clap. Continue so that students practice each dot card (numbers 1-3 only) at least twice.

STUDENTS DO: Clap to match the dot cards shown by the teacher.

Learn (25-30 mins)

Directions

TEACHER DO: Show students the 4-dot card.

TEACHER SAY: When I say go, but not until I say go, you will turn to your Shoulder Partner and talk about what you see. How is this dot card the same as the other dot cards? How is it different? Go!

STUDENTS DO: Talk with their **Shoulder Partner**. They might say things like “the cards are the same because they are both square” or “the cards are different because the new one has 4 dots.

TEACHER SAY: Raise your hand if you want to share what you and your partner talked about.

TEACHER DO: Choose students who want to share with the class.

STUDENTS DO: Selected students share their thinking with the class.

2. TEACHER DO: Display **Sky Writing** grid. Write the number 4 on the board.

TEACHER SAY: Now, I will show you how to sky write the number 4.

TEACHER DO: Sky write the number 4 slowly, making sure to say the directions with each stroke. Repeat.

TEACHER SAY: I think you are ready to sky write your own 4. Stand and make sure you do not write on your Shoulder Partner! Show me your Sky Writing arm.

TEACHER DO: Demonstrate **Sky Writing** arm. Praise students who are demonstrating proper **Sky Writing** arm. Correct students who are not.

STUDENTS DO: Practice making number 4 while reciting steps aloud.

TEACHER SAY: Good job! Please, sit down.

2. TEACHER DO: Display a large circle, square, and triangle. Point to square.

TEACHER SAY: Who can raise a quiet hand and tell me the name of this shape?

TEACHER DO: Call on a student with hand raised.

STUDENTS DO: Selected student responds: square.

TEACHER SAY: Who can raise a quiet hand and tell me the name of this shape?

TEACHER DO: Point to circle. Call on student.

STUDENTS DO: Selected student responds: circle.

TEACHER SAY: Who can raise a quiet hand and tell me the name of this shape?

TEACHER DO: Point to triangle. Call on student.

STUDENTS DO: Selected student responds: triangle.

TEACHER SAY: Now we are going to practice drawing these shapes in our math journals. When I hand you your math journal open to the first blank page.

TEACHER DO: Hand out math journals. Hold up the circle cut out.

TEACHER SAY: What is this shape again?

STUDENTS DO: Respond together: circle.

TEACHER SAY: Yes, this is a circle. Let's practice drawing circles in our math journal. Take your time so your circles look wonderful.

STUDENTS DO: Draw circles in math journal several times.

TEACHER DO: Rotate around the room helping students. Take note of students how may need additional instruction.

TEACHER SAY: Nice circles! Can you point to your best circle and tell yourself "Nice circle!"

STUDENTS DO: Point to their best circle and say "nice circle."

TEACHER DO: Hold up the square cut out.

TEACHER SAY: What is this shape?

STUDENTS DO: Respond together: square.

TEACHER SAY: Yes, this is a square. Let's practice drawing squares in our math journal. Turn to the next clean page if you need to. Take your time so your squares look fabulous.

STUDENTS DO: Draw squares in math journal several times.

TEACHER DO: Rotate around the room helping students. Take note of students how may need additional instruction.

TEACHER SAY: Nice squares! Can you point to your best square and tell yourself "super square!"

STUDENTS DO: Point to their best square and say "super square."

TEACHER SAY: What is this shape?

STUDENTS DO: Respond together: triangle.

TEACHER SAY: Yes, this is a triangle. It has 3 sides. Turn to the next clean page in your math journal and draw your best triangles.

STUDENTS DO: Draw triangles in math journal several times.

TEACHER DO: Rotate around the room helping students. Take note of students how may need additional instruction.

TEACHER SAY: Nice triangles! Can you point to your best triangle and smile at it?

STUDENTS DO: Point to their best triangle and smile at it.

Share (5 mins)

Directions

1. TEACHER SAY: We have had so much fun and learned so much while drawing our shapes. When I say go, I want you to turn to your Shoulder Partner and talk about circle, square, and triangle. How do you know a shape is a circle, square, or triangle? Go!

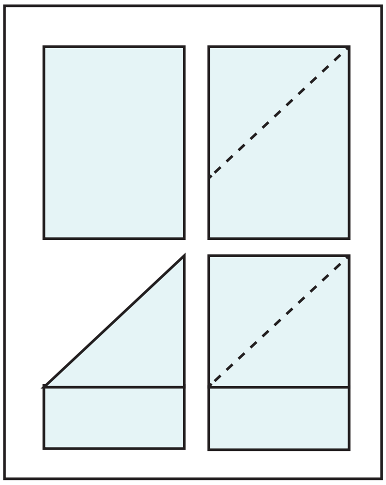
STUDENTS DO: Talk about shapes.

2. TEACHER DO: Give ample time for students to talk. Then give the **Attention Getting Signal**. Pull 3 names from the **Calling sticks** to choose students to share ideas with the whole class.

3. TEACHER SAY: Wow! We have learned so much. I want you to turn to your Shoulder Partner and say "good" 4 times.

STUDENTS DO: Say good, good, good, good!

Lesson 9 Overview



OUTCOMES

Students will:
- Identify the month, day, and date
- Count from 1 to 4
- Sky write numbers 1 to 4
- Count objects to tell how many there are to the number 4
- Create dot cards 1-4

STUDENT VOCABULARY:

- Calendar
- Month
- Day
- Dots

LESSON PREPARATION FOR THE TEACHER

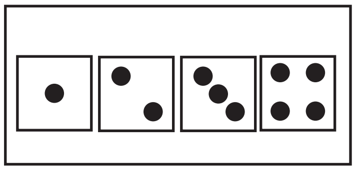
- Prepare 4 squares per student so that they can make their own dot cards. If you do not have squares, use paper and cut them into squares using the steps shown in the picture:
- Students are creating their own dot cards. Some students may have difficulty making their own dots with markers or crayons. If that is the case, consider the following options: use dot stickers, cut out dots and have students glue them on, or trace the dots and have students color them in.

MATERIALS

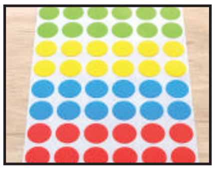
Calendar Math Area



4 large dot cards (teacher set)



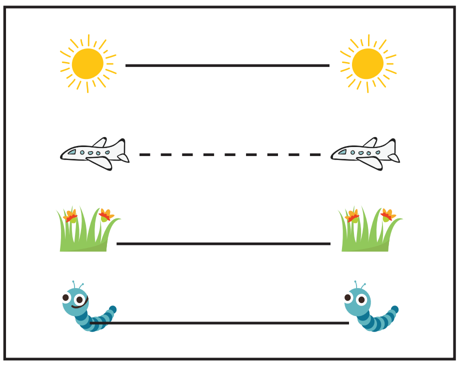
10 dots per student, or markers



4 squares of paper per student



Sky writing grid



Calendar and Movement (15-20 mins)

Directions

1. **TEACHER SAY: It's Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year such as your birthday and special holidays.**

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Who remembers what month we are in? Raise your hand if you know.

STUDENTS DO: Raise hands to show they know the answer.

TEACHER DO: Choose a student with their hand up to answer the question.

STUDENTS DO: Selected student answers the question.

TEACHER SAY: Great job! Remember, each square on the calendar represents a day. All of the days in a row make up a week.

TEACHER DO: Point to the days in one week.

TEACHER SAY: I will say the name then you repeat the name of the day after me.

STUDENTS DO: Repeat the days of the week.

TEACHER SAY: Now I will say all of the days of the week, but I will stop before I am done. Can you tell me which two days come next? Sunday, Monday, Tuesday, Wednesday, ____________, ____________, Saturday.

STUDENTS DO: Students say "Thursday, Friday" together.

TEACHER SAY: This square on the calendar represents today. Today is (day) the (number date) of (month) (year). Students can you say the date too?

STUDENTS DO: Repeat the date.

2. **TEACHER SAY: Are you ready to do Movement Math? I will clap my hands two times while counting 1, 2 then I will pause and repeat. Watch me and join in when you are ready.**

TEACHER DO: Repeat the pattern until all students understand and mimic the movement and counting.

STUDENTS DO: Watch and join in to repeat the pattern with the teacher.

TEACHER SAY: Next, watch as I add to this pattern. I still clap two times while counting 1, 2 then I clap my knees once while counting 1. Watch me and join in when you know the pattern.

TEACHER DO: Repeat the pattern until all students understand and mimic the movement and counting.

STUDENTS DO: Watch and join in to repeat the pattern with the teacher.

TEACHER SAY: Great job! Give your Shoulder Partner four handshakes!

STUDENTS DO: Give **Shoulder Partner**s four handshakes.

Learn (25-30 mins)

Directions

1. TEACHER SAY: To practice counting today, we are going to start with the same game as yesterday. I am going to show you a dot card. Clap as you count the number of dots.

TEACHER DO: Hold up the dot card with 1.

STUDENTS DO: Clap once and count 1.

TEACHER DO: Continue until you've gone through all the dot cards multiple times.

2. TEACHER SAY: Now you will make your very own dot cards so that you may play this game with your colleague.

TEACHER DO: Hand out squares.

TEACHER SAY: Look at your dot cards. What's missing?

STUDENT DO: Say "the dots" together.

TEACHER SAY: Yes, we will need to add the dots. Let's start with the 1 dot card.

TEACHER DO: Give each student 1 dot or have them draw one dot in the center of the square.

TEACHER SAY: Now find the center and stick your dot in the center. Like this.

TEACHER DO: Demonstrate dot placement.

STUDENTS DO: Observe teacher and then place their first dot.

TEACHER DO: Continue each step until every student has 4 dot cards.

3. TEACHER SAY: Now you will have a chance to play with your own dot cards. When I say go, you will turn to your Shoulder Partner and take turns showing a dot card, counting, and then clapping. I will have a student come to the front to demonstrate.

TEACHER DO: Use **Calling Sticks** to choose one student to come to the front with their dot cards.

STUDENTS DO: Volunteer holds up a dot card.

TEACHER DO: Clap and count.

TEACHER SAY: Thank you for helping. I think we are ready to clap and count with dot cards. Go!

STUDENTS DO: Play with dot cards with partner, counting and clapping.

Share (5 mins)

Directions

1. TEACHER SAY: Think about what we have done in math today. Please talk to your Shoulder Partner and tell them what was your favorite part of class and why.

STUDENTS DO: Shoulder partners share the favorite parts of class and tell why they liked it.

TEACHER SAY: Now I will use the Calling sticks and ask 3 people to share what they talked about with their Shoulder Partner.

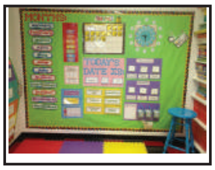
TEACHER DO: Pull three **Calling sticks**. Allow students time to share.

Lesson 10 Overview

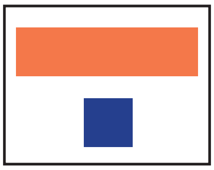
OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date • Identify and count sides and corners of a rectangle • Compare squares and rectangles • Compare lengths using the terms longer and shorter	• Compare • Five • Length • Long/Longer • Rectangle • Short/Shorter • Sort	• Cut out a large rectangle, about 25 cm x 50 cm. • Have available the large square you created for a previous lesson. Otherwise, cut out a large square with sides about 25 cm long.

MATERIALS

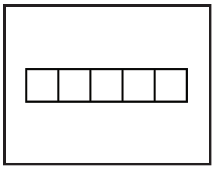
Calendar Math Area



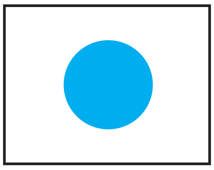
Large rectangle and square



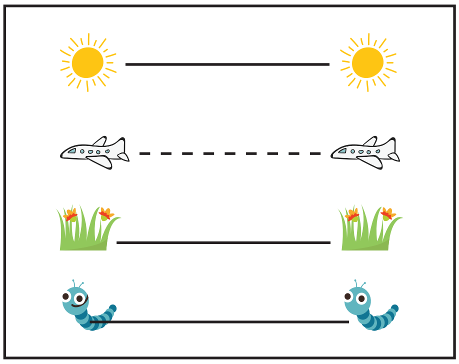
Five Frame (from Day 7)



1 dot



Sky writing grid



Calendar and Movement (15-20 mins)

Directions

TEACHER SAY: **It's Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year such as your birthday and special holidays.**

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: **Who remembers what month we are in? Raise your hand if you know.**

STUDENT DO: Raise hands to show they know the answer.

TEACHER DO: Choose a student with their hand up to answer the question.

TEACHER SAY: Yes, now everyone say it together.

STUDENTS DO: Repeat the month together.

2. TEACHER SAY: Lean & whisper to your Shoulder Partner what each square on the calendar represents.

STUDENTS DO: Lean and whisper “a day."

TEACHER SAY: All of the days in a row make up a week.

TEACHER DO: Point to the days in one week.

TEACHER SAY: I will say all of the days of the week, you can say them with me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

STUDENTS DO: Say days of the week together

TEACHER SAY: We will say all of the days of the week again, but this time we will say them quickly. Say them with me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

STUDENTS DO: Say days of the week quickly.

TEACHER SAY: Now we will say them slower. Say them with me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

STUDENTS DO: Say days of the week slowly.

TEACHER SAY: This square on the calendar represents today. Today is (day) the (number date) of (month) (year). Can you say the date too?

STUDENTS DO: Repeat the date.

TEACHER SAY: Are you ready to do Movement Math? Today we are going to continue practicing counting to 4, but we have to use our imaginations. So tap your brain to activate your imagination. Stand next to your chair.

STUDENTS DO: Tap heads, stand next to their chairs.

TEACHER SAY: Imagine I am blowing big, shiny bubbles. See how many bubbles I blow.

TEACHER DO: Pretend to dip into bubbles, hold it up and blow, then say 1, blow then 2, blow, then 3 blow, 4.

TEACHER SAY: How many bubbles did I blow?

STUDENTS DO: Respond together: 4.

TEACHER SAY: I have 4 imaginary bubbles. Can you help me pop them? Say pop, pop, pop, pop!

TEACHER DO: Pretend to pop 4 bubbles.

STUDENTS DO: Say “Pop, pop, pop, pop!”

TEACHER SAY: How many pops did I say?

STUDENTS DO: Respond together: 4.

TEACHER SAY: Yes! I have 4 bubbles so I had to pretend to make 4 pops. When I say go, blow and count 4 imaginary bubbles of your own. Be careful. Don’t pop them yet! Ready? Go! 1, 2, 3. 4.

STUDENTS DO: Pretend to blow 4 bubbles.

TEACHER SAY: Lean over to your Shoulder Partner and count their bubbles, but be careful not to pop them! Make sure they imagined 4 bubbles too!

STUDENTS DO: Count their **Shoulder Partner**'s 4 imaginary bubbles.

TEACHER SAY: On the count of 4 we will all pop our bubbles. We will say pop each time. If I have 4 bubbles, how many pops should I say?

STUDENTS DO: Respond together: 4.

TEACHER SAY: Go!

STUDENTS DO: Pretend to blow and pop out 4 bubbles.

TEACHER SAY: Great job! Please, sit down.

Learn (25-30 mins)

Directions

1. TEACHER DO: Hold up the rectangle you created.

TEACHER SAY: I have a new shape for us to talk about today! It is called a rectangle. Can you say rectangle?

STUDENTS DO: Repeat together: rectangle.

TEACHER SAY: Rectangles have sides and corners. What other shapes do we know that have sides and corners? Tell your Shoulder Partner.

STUDENTS DO: Think and share ideas with **Shoulder Partners**.

2. TEACHER SAY: Now let's count the sides of this rectangle. Count as I point to each side. 1, 2, 3, 4!

STUDENTS DO: Count along with the teacher.

TEACHER SAY: Count the corners with me, 1, 2, 3, 4.

STUDENTS DO: Count the corners with the teacher.

TEACHER SAY: This is a lot like a square!

TEACHER DO: Hold up the square you created.

TEACHER SAY: A square also has 4 sides and 4 corners. But a rectangle is a little different from a square. How does are these two shapes different? Talk about it with your Shoulder Partner.

STUDENTS DO: Talk with their **Shoulder Partner** about the difference: rectangles do not have 4 equal sides.

TEACHER SAY: Now, raise your hand if you think you know.

STUDENTS DO: Raise hands to respond.

TEACHER DO: Select students with hands raised to answer the question.

3. TEACHER SAY: Let's talk about it! All four sides of a square are the same length. Length means how long something is. When we talk about length, we use the words long and short or longer and shorter.

TEACHER DO: Point to the sides of the square.

TEACHER SAY: But, the sides of a rectangle are not all the same length.

TEACHER DO: Point to the long sides of the rectangle as you talk about them.

TEACHER SAY: This side and this side of the rectangle are long. Can you say the word long while stretching your arms out to the sides to show how long they are?

STUDENTS DO: Say the word long and stretch out their arms to the sides.

TEACHER DO: Demonstrate stretching arms out wide with hands held as if you are measuring something long.

TEACHER DO: Point to the short sides of the rectangle as you talk about them.

TEACHER SAY: This side and this side of the rectangle are short. Can you say short while you bring your hands close together in front of you with just a little space between them?

STUDENTS DO: Say the word short and bring hands close together.

TEACHER DO: Demonstrate holding hands close together as if you are holding something short.

TEACHER SAY: A square has 4 sides that are all the same length. A rectangle has 4 sides, but 2 are long and 2 are short. Great job learning a rectangle! Look around the room and see if you can find any rectangles in our classroom.

STUDENTS DO: Look around the room to find rectangles.

TEACHER DO: Select students to share observations. If possible, gather the items (or have students gather them) to show their colleagues. Take note of students who are struggling to recognize shapes.

TEACHER SAY: You found a lot of rectangles. Nice work!

Share (5 mins)

Directions

1. **TEACHER SAY: Think about all the other shapes we know – circles, triangles, and squares. Look around the room. Do you see any of those shapes in our classroom? Raise your hand if you see one of those shapes.**

STUDENTS DO: Look around the room. Raise hands to share their observations.

TEACHER DO: Select students to share their observations. If possible, gather the items (or have students gather them) to show their colleagues. Take note of students who are struggling to recognize shapes.

TEACHER SAY: Great job! We see all kinds of shapes everywhere! When you go home today, see if you can find those shapes in your home.

KINDERGARTEN I

Mathematics

CHAPTER 2

Lessons 11-20

Overview

Lessons 11-20

COMPONENT	DESCRIPTION	TIME
Calendar and Movement	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills. Students explore quantity and practice counting through patterns and movement.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from colleagues' perspectives.	5-10 minutes

Learning Indicators

Throughout this Chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY:

- Count objects to tell how many there are.
- Count by ones up to 10.
- Understand the relationship between numbers and quantities to five.
- Represent a number (0-10) by producing a set of objects or pictures.
- Identify the number of objects in familiar groupings without counting.
- Apply the understanding that each successive number name refers to a quantity that is one larger as they count.
- Understand the concepts of greater than, less than, and equal to with up to 5 objects.
- Compare two numbers between 1 and 10 presented as objects, drawings, etc.

MEASUREMENT:

- Compare orally between length and weight and size using longer than/shorter than, heavier/lighter, bigger/smaller.
- Classify objects into given categories (for example length, weight, size, color) and sort categories by count.

GEOMETRY:

- Correctly name 2-dimensional shapes (triangle, circle, rectangle, square).
- Compose larger shapes by combining simple shapes.

Day 11-20 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
11	**Students will:** • Identify the month, day, and date • Count from 1 to 5 • Use a five frame to recognize quantities 1-5 • Count objects to tell how many there are to the number 5 • Compare objects using the terms longer and shorter
12	**Students will:** • Identify the month, day, and date • Count from 1 to 5 • Sky write number 5 • Count objects to tell how many there are up to 5 • Demonstrate understanding of the relationship between number and quantity
13	**Students will:** • Identify the month, day, and date • Count from 1 to 5 • Sky write numbers 1 to 5 • Compare quantities using the terms more and less • • Demonstrate understanding of the relationship between number and quantity
14	**Students will:** • Identify the month, day, and date • Count from 1 to 5 • Create a dot card for 5 • Compare quantities using the terms 1 more and 1 less
15	**Students will:** • Identify the month, day, and date • Count from 1 to 6 • Use five frames to recognize quantities 1-6 • Count objects to tell how many there are to the number 6 • Sort objects by shape
16	**Students will:** • Identify the month, day, and date • Count from 1 to 6 • Sky write number 6 • Count objects to tell how many there are up to 6 • Sort objects by shape and color
17	**Students will:** • Identify the month, day, and date • Count from 1 to 6 • Sky write numbers 1-6 • Create a dot card for 6 • Sort objects by shape and color

LESSON	INSTRUCTIONAL FOCUS
18	**Students will:** • Identify the month, day, and date • Count from 1 to 7 • Use five frames to recognize quantities 1-7 • Count objects to tell how many there are to the number 7
19	**Students will:** • Identify the month, day, and date • Count from 1 to 7 • Sky write number 7 • Count objects to tell how many there are up to 7 • Demonstrate understanding of the relationship between number and quantity
20	**Students will:** • Identify the month, day, and date • Count from 1 to 7 • Sky write numbers 1-7 • Create a dot card for 7

Chapter Preparation for the Teacher

Day 20: Celebrating Shapes

- On Day 20, students will create art projects using circles, squares, triangles, and rectangles. They will need a large collection of items to trace or glue down to create pictures. It is suggested that you read the lesson in advance and begin to prepare as early as possible.
  - If possible, no later than Day 11 send a letter home with students asking parents to trace 1 example of each shape onto light cardboard (such as a cereal box or shoe box), cut them out, and send them to school with their children. That way, students will have a large collection of different-sized shapes to trace for their art projects.
  - Another option is to ask students to bring in found objects (with permission from their parents!) that they can use to trace shapes (or glue onto paper). Examples include: straws, empty toilet paper and paper towel rolls, old CDs, old CD cases, playing cards, shapes cut from cereal boxes (with parent's help!), and round lids and caps.

Lesson 11 Overview

OUTCOMES

Students will:

- Identify the month, day, and date
- Count from 1 to 5
- Use a five frame to recognize quantities 1-5
- Count objects to tell how many there are to the number 5
- Compare objects using the terms longer and shorter

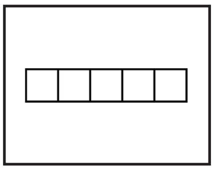
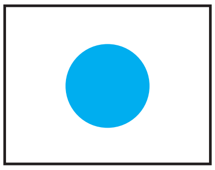
STUDENT VOCABULARY:

- Compare
- Five
- Length
- Long/Longer
- Short/Shorter
- Sort

LESSON PREPARATION FOR THE TEACHER

- Create or print out blank five frames (one per student)
- Cut out 1 circle to use as a dot on the five frame.
- Gather 5 sets of counting objects (one set per student) Example: beans, dry pasta, small stones, math counters, connecting cubes)
- Create a Mystery Bag for yourself: Put 2-3 long sticks and 2-3 short sticks in a bag.
- Create Mystery Bags for students: Put 2-3 long straws and 2-3 short straws (cut from longer straws). You will need 1 bag per pair of students.
    - If supplies are limited, create enough bags for students to work in small groups.

MATERIALS

Calendar Math Area		Five frame (from previous lesson)	
1 dot		Tape or glue stick	
Sets of 5 counting objects (one per student) (See Lesson Preparation for the Teacher for instructions.)		Mystery Bag for the Teacher (See Lesson Preparation for the Teacher for instructions.)	
Mystery Bags for the students. (See Lesson Preparation for the Teacher for instructions.)			

Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: It is Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days like your birthday and holidays.

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Give me a thumbs up if you remember what month we are in?

STUDENTS DO: Give teacher a thumbs up.

TEACHER SAY: Tell me everyone, what month are we in?

STUDENTS DO: Say the month together.

TEACHER SAY: Whisper in your hand: What shapes on the calendar represent a day?

STUDENTS DO: Whisper "the squares" in their hand.

TEACHER SAY: The squares represent the days. All of the days in a row make up a week. Point to the week.

STUDENTS DO: Point to the days in one week.

2. TEACHER SAY: Let's say all of the days of the week together.

STUDENTS DO: Say days of the week with the teacher.

TEACHER SAY: Let's say all of the days of the week again, but we will say them leaning to the left.

TEACHER DO: Lean to the right (the students' left) to model.

STUDENTS DO: Say the days of the week together while leaning to the left.

TEACHER SAY: Now let's say the days of the week on more time, but we will say them leaning to the right.

TEACHER DO: Lean to the left (the students' right).

STUDENTS DO: Lean to the right and say days of the week again.

3. TEACHER SAY: Now I want to find the square on the calendar that represents today. Can you point to it?

STUDENTS DO: Point to today.

TEACHER DO: Put your finger on today's square.

TEACHER SAY: Did you point to this square? This square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now you say the date.

STUDENTS DO: Say the date together.

4. TEACHER SAY: Let's do Movement Math! Let's count to five together: 1, 2, 3, 4, 5.

STUDENTS DO: Count to 5 with the teacher.

TEACHER SAY: Now let's lean and count. First, I will lean to the left to say 1, then lean to the right to say 2, then to the left again. Join me when you understand the pattern.

TEACHER DO: Say 1 and lean to the right (students' left), say 2 and lean to the left (students' right), say 3 and lean to the right (students' left), say 4 and lean to the left (students' right), say 3 and lean to the right (students' left). Repeat several times until all students are joining.

STUDENTS DO: Join the pattern and count aloud with the teacher.

TEACHER SAY: Good job with your lean and count! Give your brain a high five.

TEACHER DO: Pat head.

STUDENTS DO: Pat their head.

Learn (25-30 mins)

Directions

1. TEACHER SAY: You are doing such a great job learning numbers! I think you are ready to learn a new number and it is a special one! Here are some clues: It comes right after 4. It is 1 more than 4. If you know what our new number is, give me a thumbs up.

STUDENTS DO: Give a thumbs up if they know the new number.

TEACHER DO: Call on a student with a thumb up to say the new number.

STUDENTS DO: Selected student answers: 5.

TEACHER SAY: Our new number is 5! Let's see how many 5 is.

2. TEACHER DO: Display five frame showing 4 dots (from previous lessons).

TEACHER SAY: How many dots are on our 5 frame? Count with me.

STUDENTS DO: Count the dots with the teacher.

TEACHER SAY: Five is 1 more than 4, so how do I show 5 on the five frame?

STUDENTS DO: Respond together: Add a dot.

TEACHER SAY: I need to add 1 dot.

TEACHER DO: Add 1 dot to the five frame.

TEACHER SAY: Count the dots with me again.

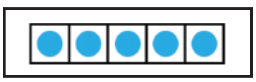
STUDENTS DO: Count with teacher: 1, 2, 3, 4, 5.

TEACHER SAY: Look! We have filled up our five frame! Let's count together one more time: 1, 2, 3, 4, 5. We can count every dot on this five frame and we will always get to five.

Once we know this, we won't even have to count every dot to know there's five. If we see a full five frame, we will just KNOW that there are 5 dots! How many dots are in a full five frame?

STUDENTS DO: Answer together: 5.

2. TEACHER SAY: Now it is your turn to practice showing 5.



TEACHER DO: Hand out a blank five frame and a set of counters to each student.

TEACHER SAY: I gave you a five frame and 5 counters. Practice showing 5 by putting 1 counter on each square of your five frames. Then count the counters.

STUDENTS DO: Put counters on five frames. Count the counters.

TEACHER SAY: Show your Shoulder Partner your work. Practice counting to 5 together.

STUDENTS DO: Show their work to their partners. Count to 5 with their partners.

TEACHER SAY: Wonderful! We will explore 5 more in our next math lesson. Now we're going to talk about the comparing words we used in our last math lesson.

TEACHER DO: Collect five frames and counters.

3. TEACHER SAY: In our last math lesson, we compared the sides of squares and rectangles. Rectangles have two short sides and two long sides. Today, we are going to practice comparing lengths using the words longer and shorter.

TEACHER DO: Show students your Mystery Bag.

TEACHER SAY: Let's see what's inside my Mystery Bag!

TEACHER DO: Pull out a long stick from the bag.

TEACHER SAY: Take a look at this stick. See how long it is?

TEACHER DO: Pull out a short stick from the bag.

TEACHER SAY: This stick is shorter than the first stick I pulled out. How do I know it is shorter?

TEACHER DO: Using **Calling Sticks** to get student response.

STUDENTS DO: Selected students respond. Possible answers include: it is not as long as the other stick, the sticks are different sizes.

4. TEACHER SAY: We are going to sort the sticks in my Mystery Bag. When I pull a stick you will say long or short. Ready?

TEACHER DO: Pull out a stick from the mystery bag. Hold up the stick to show students the length.

STUDENTS DO: Say long or short aloud.

TEACHER DO: After students say long or short, place the sticks in two piles – a pile of long sticks and a pile of short sticks.

TEACHER SAY: You helped me sort my sticks. The sticks in this pile (indicate the long pile) are longer than the sticks in that pile (indicate the short pile). The sticks in this pile (indicate the short pile) are shorter than the sticks in that pile (indicate the long pile). I compared the lengths of the sticks using the words longer and shorter. Now you are going to sort your own Mystery Bags!

5. TEACHER DO: Hand out bags to **Shoulder Partners**.

TEACHER: Work together to compare the lengths of the items inside the bag. Sort them into two piles – a long pile and a short pile. You may begin.

STUDENTS DO: Compare lengths of straws in Mystery Bags and sort them into piles of long straws and short straws.

TEACHER DO: Walk around and observe how students sort. Take note of students who may need additional instruction.

TEACHER SAY: Please put all the straws back into your Mystery Bag. I will collect them.

STUDENTS DO: Clean up straws and return bags to the teacher.

Share (5 mins)

Directions

1. TEACHER SAY: Today, we compared the lengths of things and sorted them into piles of longer and shorter. Sometimes we had to hold them next to the other to compare. I want you to look around the room with your eyes and see something that is longer and something that is shorter.

TEACHER DO: Give ample thinking time. Point out some things for students who are struggling or not engaged.

STUDENTS DO: Look around the room for items they think are long and short.

2. TEACHER SAY: When I say go – and not until I say go – you will turn to your Shoulder Partner and point to the two things you see that are longer or shorter. Tell them why you think that. Go!

STUDENTS DO: Talk to their **Shoulder Partner**s and point to things around the room.

Note for the Teacher: Students may need to get up and go point to an object if they do not know what it is and do not have the words to describe it. Be patient.

TEACHER DO: Use a signal to get students' attention.

TEACHER SAY: We have worked so hard on math today. Lean and whisper to your Shoulder Partner, tell them, "You did well."

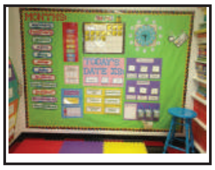
STUDENTS DO: Lean and whisper, "You did well" to **Shoulder Partner**s.

Lesson 12 Overview

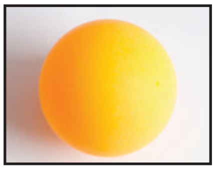
OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date • Count from 1 to 5 • Sky write number 5 • Count objects to tell how many there are up to 5 • Demonstrate understanding of the relationship between number and quantity	• Five • Five frame	• Have a ball available. • Have the large 1 and 2 dot cards from your set.

MATERIALS

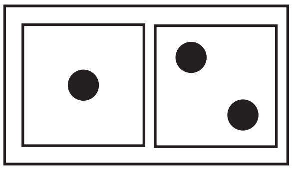
Calendar Math Area



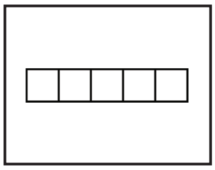
Ball



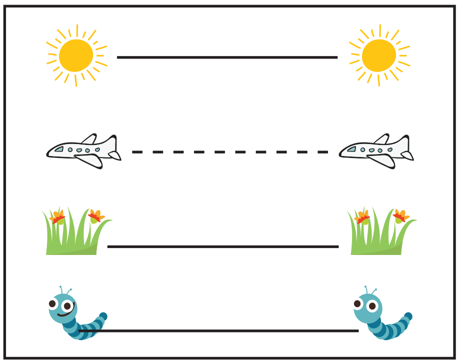
Dot cards 1 and 2 (Teacher set)



Five Frame (from Day 11)



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. **TEACHER SAY: It is Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days like your birthday and holidays.**

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Tell me everyone, what month are we in?

STUDENTS DO: Say the month together.

TEACHER SAY: Each square on the calendar represents a day. All of the days in a row make up a week.

2. TEACHER DO: Point to the days in one week.

TEACHER SAY: Let's stand up and say all of the days of the week together.

STUDENTS DO: Stand and say days of the week with the teacher.

TEACHER SAY: (Speak in a deep voice, dropping arms down) Let's say them again, but this time we will say them in a deep voice like a cartoon hippo.

TEACHER DO: Say the names of the days of the week in a deep voice.

STUDENTS DO: Say with the teacher the names of the days of the week in a deep voice.

3. TEACHER SAY: Have a seat. Now I want to find the square on the calendar that represents today. Who would like to come up and point to it?

TEACHER DO: Use **Calling Sticks** to select a student.

STUDENTS DO: Selected student points to today's square on the calendar.

TEACHER SAY: Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Can you say the date, too?

STUDENTS DO: Repeat the date together.

4. TEACHER SAY: Let's do Movement Math now! First I will stand and reach up to the sky to say 1, then I will touch my toes to say 2, then reach up again and say 3, then back down to my toes to say 4, and back up to say 5. Watch me and join in when you understand the pattern.

TEACHER DO: Stand, say 1 and reach up, say 2 and touch toes, say 3 and reach up, say 4 and touch toes, say 5 and reach up. Repeat several times until all students have joined.

STUDENTS DO: Follow the pattern while counting.

TEACHER SAY: Good job with your up and down counting! Have a seat and give your brain a high five.

TEACHER DO: Pat head.

STUDENTS DO: Sit down and pat their heads.

Learn (25-30 mins)

Directions

1. TEACHER SAY: Yesterday, we learned about the number 5. Let's see what 5 looks like and practice Sky Writing it together.

TEACHER DO: Write the number 5 on the board.

TEACHER SAY: I will sky write while you watch. I will say the steps aloud so you can say them with me when it is your turn.

TEACHER DO: Sky write a 5 slowly, saying the steps aloud as you write.

STUDENTS DO: Observe.

TEACHER SAY: What number did I write?

STUDENTS DO: Respond together: 5.

TEACHER SAY: Stand up and get your Sky Writing arms ready. Let's write!

TEACHER DO: Sky write 5 slowly, saying the steps aloud.

STUDENTS DO: Sky write 5 repeating the steps aloud.

TEACHER DO: Practice a few more times before moving on.

2. **TEACHER SAY: Today we are going to practice counting to 5 by playing The Counting Game. Everyone stand up.**

STUDENTS DO: Stand up.

TEACHER SAY: We are going to pass this ball around the room as we count aloud from 1 to 5. Everyone stand up. I will show you how to play the game and then we will play it.

TEACHER DO: Pass the ball to a student.

TEACHER SAY: ______ (name of student #1) will go first. ______ (name of student #1) counts 1, passes the ball to a neighbor, and sits down.

STUDENTS DO: First player counts 1, passes the ball to a neighbor, and sits down.

TEACHER SAY: Good! ______ (name of student #2) now has the ball. ______ (name of student #2) counts 2, passes the ball to a neighbor, and sits down.

STUDENTS DO: Second player counts 2, passes the ball to a neighbor, and sits down.

TEACHER SAY: Good! ______ (name of student #3) now has the ball. ______ (name of student #3) counts 3, passes the ball to a neighbor, and sits down.

STUDENTS DO: Second player counts 3, passes the ball to a neighbor, and sits down.

TEACHER SAY: We continue to count, pass, and sit until we get to 5. Then we start over at 1. We will play until everyone is sitting down. Let's play!

TEACHER DO: Hand ball to a new student.

STUDENTS DO: Play the game until all students are seated.

TEACHER DO: Collect the ball.

3. **TEACHER SAY: Today we counted to 5 while we moved our bodies and we counted to 5 while we passed a ball. But what if we didn't have to count? What if we saw objects and just knew how many there are without counting? I am going to show you a card and you tell me how many dots are on it without counting.**

TEACHER DO: Display dot card for 1 for 2 seconds, then turn it face down.

TEACHER SAY: How many dots were on the card?

STUDENTS DO: Call out the answer if they know. Some students will answer 1.

TEACHER SAY: How did you know there was 1 dot on the card? Did you have to count?

TEACHER DO: Point to 1 or 2 students who said 1 and ask them to share their thinking.

TEACHER SAY: I am going to show you another card. See if you know how many dots are on the card without counting.

TEACHER DO: Display dot card for 2 for 2 seconds, then turn it face down.

TEACHER SAY: How many dots were on the card?

STUDENTS DO: Call out the answer if they know. Some students will answer 2.

TEACHER SAY: **How did you know there were 2 dots on the card? Did you have to count?**

TEACHER DO: Point to 1 or 2 students who said 2 and ask them to share their thinking.

TEACHER SAY: **Tomorrow, we will take a look at more dot cards together to see if we can figure out how to tell "how many" without counting.**

Share (5 mins)

Directions

1. TEACHER DO: Display a completed five frame.

TEACHER SAY: **What fun we've had learning today! I'd like to hear your thinking about this five frame. I wonder why it is called a five frame. Hmmm. Please talk to your Shoulder Partner and tell them what you think.**

STUDENTS DO: **Shoulder partner**s share why they think it is called a five frame. Students should notice that the frame holds up to five dots.

TEACHER SAY: **Now I will use the Calling Sticks and ask 3 people to share what they talked about with their Shoulder Partner.**

TEACHER DO: Pull 3 **Calling Sticks**. Allow students time to share. Take note of students who have a solid understanding of the relationship between quantity and number and those who may need additional instruction.

Lesson 13 Overview

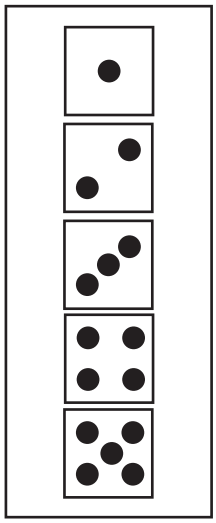
OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date • Count from 1 to 5 • Sky write numbers 1 to 5 • Compare quantities using the terms more and less • Demonstrate understanding of the relationship between number and quantity	• Compare • Five • Less • More • Patterns	• No new materials needed.

MATERIALS

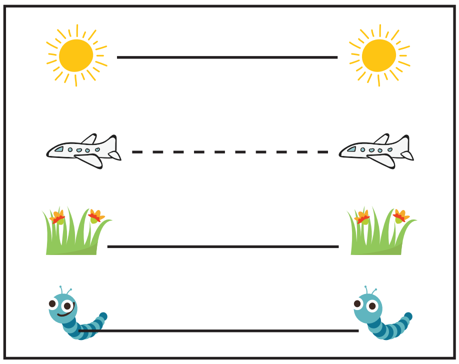
Calendar Math area



Large Dot Cards 1-5 (Teacher set)



Sky Writing Grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: It is Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days like your birthday and holidays.

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Give me a thumbs up if you remember what month we are in.

STUDENTS DO: Give teacher a thumbs up.

TEACHER SAY: Tell me everyone, what month are we in?

STUDENTS DO: Say the month together.

2. TEACHER SAY: What do the squares on the calendar represent? Raise your hand if you know.

STUDENTS DO: Raise hands to respond.

TEACHER DO: Choose a student with their hand up to answer the question.

TEACHER SAY: Yes, the squares represent days. All the days in a row make up the week. Let's say all of the days of the week together: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

STUDENTS DO: Say the days of the week with the teacher.

TEACHER SAY: Great job, Raise your hand if you can you point to the square that is today?

STUDENTS DO: Raise hands to respond.

TEACHER DO: Choose a student with their hand up to come point to the square that represents today.

TEACHER SAY: Nice job! Today is (day) the (number date) of (month) (year). Now, you say the date.

STUDENTS DO: Say the date together.

3. TEACHER SAY: Now let's get up and move! Stand up and make sure you have room.

STUDENTS DO: Stand up.

TEACHER DO: Give the movement directions below (or substitute movements you prefer). Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY:

- **Hop 1 time.**
- **Put your arms up 2 times.**
- **Touch your toes 3 times.**
- **Do 4 jumping jacks.**
- **Pretend you are a bird and spread your wings. Flap your wings 5 times.**

STUDENTS DO: Follow each direction, doing each movement the correct number of times.

TEACHER SAY: Very good imaginations! Give your brain a high five.

TEACHER DO: Pat head.

STUDENTS DO: Pat heads.

Learn (25-30 mins)

Directions

1. TEACHER SAY: Yesterday, we learned how to Sky Write the number 5. Let's practice Sky Writing all the numbers we know from 1 to 5. Stand up and get your Sky Writing arms ready.

STUDENTS DO: Stand and hold out a straight arm with two fingers pointing.

TEACHER SAY: Sky writing arms ready? Let's sky write.

TEACHER DO: Sky write numbers 1 to 5, saying steps aloud.

STUDENTS DO: Sky write 1 to 5 with the teacher, saying the steps aloud.



2. TEACHER SAY: Great work! Soon, you will be ready to write our numbers using a pencil! Now let's count from 1 to 5 on our fingers. We will need both of our hands! Please count your fingers as I count mine.

TEACHER DO: Hold up 5 fingers. Show students how to use the pointer finger from one hand to count fingers on the other hand.

TEACHER SAY: **Count from 1 to 5 with me. Touch each finger as you count.**

STUDENTS DO: Count from 1 to 5 with the teacher, touching each finger as they count.

TEACHER SAY: **That's why we call it a high five, because we have five fingers on each hand. Everyone give me an air high five.**

TEACHER DO: Give air high five to the class.

STUDENTS DO: Give air high five to teacher.

TEACHER SAY: **Give your Shoulder Partner a real high five.**

STUDENTS DO: Give **Shoulder Partner** a high five.

2. TEACHER SAY: **Yesterday, we talked about getting so good at numbers that we do not always have to count to know how many there are. Let's take a look at the dot cards I showed you yesterday. I am going to quickly show you a card and then hide it. Give me a thumbs up if you know how many dots are on the card. Ready?**

STUDENTS DO: Confirm they are ready.

TEACHER DO: Show the 1 dot card for 1-2 seconds, then turn it face down.

STUDENTS DO: Give a thumbs up if they know how many dots are on the card.

TEACHER SAY: **How many dots were on the card?**

STUDENTS DO: Call out: 1.

TEACHER SAY: **How did you know?**

TEACHER DO: Point to students you want to answer.

STUDENTS DO: Selected students share their thinking.

TEACHER SAY: **Here comes the next card. Give me a thumbs up if you know how many dots are on the card.**

TEACHER DO: Flash the 3 dot card for 2 seconds, then turn it face down.

STUDENTS DO: Give a thumbs up if they know how many dots are on the card.

TEACHER SAY: **How many dots were on the card?**

STUDENTS DO: Call out: 3.

TEACHER SAY: **How did you know?**

TEACHER DO: Point to students you want to answer.

STUDENTS DO: Selected students share their thinking.

Note for the Teacher: Some students may know that the card shows 3 dots. If students talk about the dot patterns in their explanations, build on their conversations to help their colleagues understand how to use the patterns to recognize quantities without counting. If no students know, take this opportunity to introduce the concept.

TEACHER DO: Display the dot card for 4.

TEACHER SAY: Does this card show more or less dots than the 3 card? Give me a thumbs up if you think you know.

STUDENTS DO: Give a thumbs up if they know.

TEACHER DO: Select a student with a thumbs up to answer.

TEACHER SAY: How do you know?

STUDENTS DO: Selected student explains how they know.

Note for the Teacher: Students may not be able to explain how they know, but this is a great opportunity to gain understanding of their thinking.

TEACHER SAY: This card has 4 dots. Is 4 more than 3 or less than 3?

STUDENTS DO: Call out answer together: more.

TEACHER DO: Display the 3 dot card with the 4 dot card.

TEACHER SAY: 4 is more than 3. (Point at 3 dot card.) This card has 3 dots. They go from one corner of the card to the other. There is 1 dot in the middle. (Point at 4 dot card.) This card has 4 dots. There is a dot in every corner and nothing in the middle. I am going to show you one more card.

TEACHER DO: Hold the 5 dot card up for 2 seconds, then turn it face down.

TEACHER SAY: Did that card have more or less than 4 dots? Give me a thumbs up if you think you know.

STUDENTS DO: Give a thumbs up if they know.

TEACHER DO: Select a student with a thumbs up to answer.

TEACHER SAY: How do you know?

STUDENTS DO: Selected student explains how they know.

TEACHER DO: Display the 5 dot card with the 3 and 4 dot cards.

TEACHER SAY: The 4 dot card has dots in every corner. So does the 5 card, but it also has a dot in the middle, so I know it has more dots than the 4 card.

TEACHER DO: Flash the 2 dot card for about 1 second, then turn it face down.

TEACHER SAY: Does this card have more or less than 4 dots? Give me a thumbs up if you know.

STUDENTS DO: Give a thumbs up if they know.

TEACHER DO: Select a student with a thumbs up to answer.

TEACHER SAY: I am not giving you enough time to count the dots, so how do you know?

STUDENTS DO: Selected student explains how they know.

TEACHER DO: Add the 1 and 2 dot cards to the display.

TEACHER SAY: You have shared some amazing thinking about numbers and counting today. Let's practice with our dot cards more tomorrow!

Share (5 mins)

Directions

1. **TEACHER SAY: Think about what we have done in math today. Please talk to your Shoulder Partner about using patterns. Do we always have to count to tell how many there are?**

STUDENTS DO: Share their thinking with their partners.

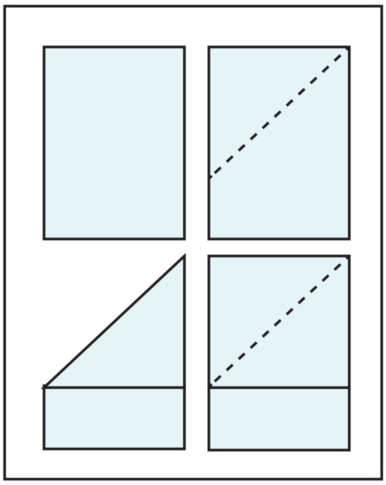
TEACHER DO: Give ample time to talk and then use an **Attention Getting Signal**.

TEACHER SAY: Raise a quiet hand if you would like to share what you talked about with you Shoulder Partner .

STUDENTS DO: Raise hand to share.

TEACHER DO: Call on students with raised hands. Allow students time to share. Take note of students who demonstrate a strong understanding of quantity and patterns. Consider pairing them in future instruction with students who need additional support.

Lesson 14 Overview



OUTCOMES

Students will:
- Identify the month, day, and date
- Count from 1 to 5
- Compare quantities using the terms 1 more and 1 less
- Create a dot card for 5

STUDENT VOCABULARY:

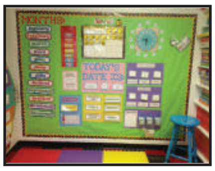
- Compare
- Left
- Less
- More
- Right

LESSON PREPARATION FOR THE TEACHER

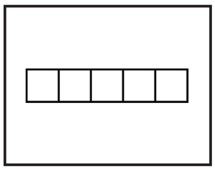
- Create or print out large five frame.
- Color and cut out 5 circles to use as dots on the five frame.
- Tape 5 dots to the large five frame.
- Prepare 1 square per student so that they can make their own dot cards. If you do not have squares, use paper and cut them into squares using the steps shown in the picture.
- Students need 5 dots to make their card (or markers to draw them).

MATERIALS

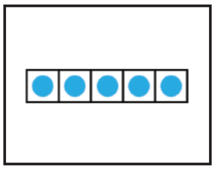
Calendar Math Area



Large Five Frame



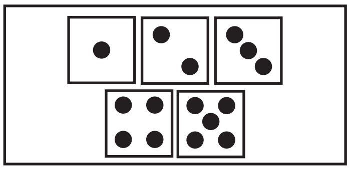
5 circles to use as dots on the five frame



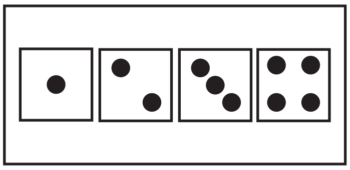
Tape (for five frame activity)



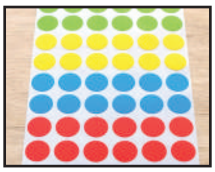
Large Dot Cards (Teacher set)



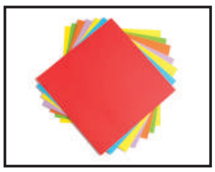
Students' Dot Cards (1-4)



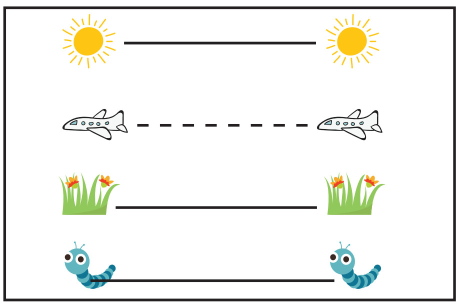
5 dot stickers per student (or markers for students to draw them)



1 square of paper per student



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: It is Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days like your birthday and holidays.

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Tell me everyone, what month are we in?

STUDENTS DO: Say the month together.

TEACHER SAY: Each square on the calendar represents a day. All of the days in a row make up a week. Point to the week.

STUDENTS DO: Point to the days in one week.

2. TEACHER SAY: Let's say all of the days of the week together.

STUDENTS DO: Say the days of the week with the teacher.

TEACHER SAY: Now I want to find the square on the calendar that represents today. Can you point to it?

STUDENTS DO: Point to today.

TEACHER SAY: This square on the calendar represents today. Today is (day) the (number date) of (month) (year). Students can you say the date too?

STUDENTS DO: Repeat the date.

3. TEACHER SAY: Let's do Movement Math! Let's count to 5, but first I will stand and stretch to the left to say 1, then stretch to the right to say 2, then to the left to say 3 and so on. Watch me and join in when you understand the pattern.

TEACHER DO: Stand. Say 1 and stretch to the right (students' left). Say 2 and stretch to the left (students' right). Say 3 and stretch to the right (students' left). Repeat and alternate to 5. Repeat several times until all students have joined in.

STUDENTS DO: Join in and follow the counting and movement pattern.

TEACHER SAY: Good job with your lean and count! Give your brain a high five.

TEACHER DO: Pat head.

STUDENTS DO: Pat their heads.

Learn (25-30 mins)

Directions

1. TEACHER SAY: We have been talking about 1, 2, 3, 4, and 5 in so many different ways! Every time we talk about them, we learn a little more about counting and numbers. Yesterday we looked at dot cards and talked about more and less.

One of the first things we learn when we are really little is more. We ask for more milk, more juice, more _______ (sweet food item)! What does more mean?

STUDENTS DO: Raise hands to answer.

TEACHER DO: Select students to answer. As you read the question below, hold up 4 fingers on one hand and 1 finger on the other hand.

TEACHER SAY: So if we have 4 candies and we ask for 1 more, how many candies will we have? Think about it and I will point to one of you to answer.

TEACHER DO: Point to a student.

STUDENTS DO: Say: 5.

TEACHER DO: If no students know that 4 and 1 more is 5, jump forward to talking about the five frame. For the next question, hold up 5 fingers.

TEACHER SAY: So more means the amount goes up. What does less mean? What is 1 less than 5?

STUDENTS DO: Raise hands to answer. Selected students share their thinking.

2. TEACHER DO: Display five frame with 5 dots.

TEACHER SAY: Count the dots on this five frame as I point to them.

STUDENTS DO: Count aloud.

TEACHER SAY: There are 5 dots. I want to find 1 less than 5. To find 1 less, do I add 1 dot or take 1 away? Whisper your answer in your hand.

STUDENTS DO: Whisper their answers into their hands.

TEACHER SAY: I need to take 1 dot away. If I take 1 dot away, there won't be as many dots as before. There will be 1 less.

TEACHER DO: Take 1 dot off the five frame leaving 4 dots.

TEACHER SAY: Let's count to see how much 1 less than 5 is. Count with me: 1, 2, 3, 4.

STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: One less than 5 is 4. We have 4 dots. Let's find 1 less than 4. One less means we're taking away 1 dot.

TEACHER DO: Take 1 dot off the five frame leaving 3 dots.

TEACHER SAY: Now let's count to see how much 1 less than 4 is. Count with me: 1, 2, 3.

STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: What is 1 less than 4?

STUDENTS DO: Respond together: 3.

TEACHER SAY: If I take away another dot, I will have 1 less than 3. Whisper in your hand what you think that will be.

STUDENTS DO: Whisper their answers into their hands.

TEACHER DO: Take 1 dot off the five frame leaving 2 dots.

TEACHER SAY: 2 is 1 less than 3. We have 2 dots. It is like we're counting backwards! Lean and whisper to your Shoulder Partner what 1 less than 2 will be.

STUDENTS DO: **Lean and whisper** answer to **Shoulder Partners**.

TEACHER SAY: **Let's see if you are right!**

TEACHER DO: Take 1 dot off the five frame leaving 1 dot.

TEACHER SAY: **One less than 2 is 1. If you were right give your brain a high five!**

STUDENTS DO: Pat head.

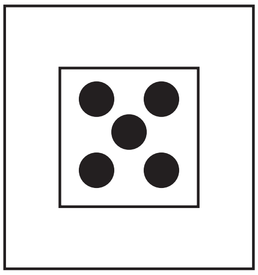
TEACHER DO: Pat head.

TEACHER SAY: **If your Shoulder Partner was right give them a high five.**

STUDENTS DO: Give **Shoulder Partner** a high five.

2. TEACHER SAY: **We already made dot cards for numbers 1 through 4. Today, we're going to add a 5 dot card to our sets.**

TEACHER DO: Hand out squares and dots or markers.



TEACHER SAY: **Watch me as I show you how to make a pattern for 5 on your dot card.**

TEACHER DO: Draw a large square on the board. Draw the 5 dot pattern in the square.

STUDENTS DO: Observe, then make their own 5 dot cards.

TEACHER DO: As students work, hand out their 1-4 dot cards (if you have been storing them). Monitor students' progress and offer help as needed. For students who need extra support, consider having them work with a partner who can help them.

TEACHER SAY: **Tomorrow, you will work with a partner using your dot cards. Please put your new 5 dot card with your other dot cards and ______ (put them away/I will collect them).**

STUDENTS DO: Put cards away or prepare them for collection.

Share (5 mins)

Directions

1. TEACHER SAY: **Let's take a look at our dot cards to share you know about 1 more and 1 less. I am going to flash a card for about 2 seconds.**

TEACHER DO: Show the 3 dot card for about 2 seconds.

TEACHER SAY: **Now, I am going to show you another card. Give me a thumbs up if it shows more than the first card. Give me a thumbs down if it shows less than the first card.**

TEACHER DO: Display either the 2 or 4 dot card for 2 seconds.

STUDENTS DO: Give a thumbs up or thumbs down.

TEACHER DO: Let students know which answer was correct. Repeat for the last dot card.

TEACHER SAY: **How did you know if the cards I showed you were more or less than the first card?**

STUDENTS DO: Explain their thinking and strategies to the teacher and colleagues.

TEACHER SAY: **What great math thinkers you are! Good job!**

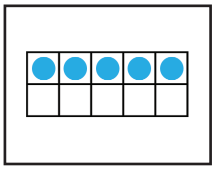
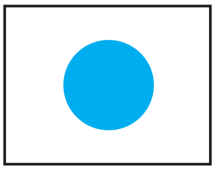
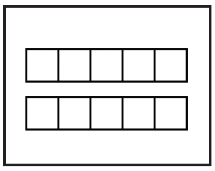
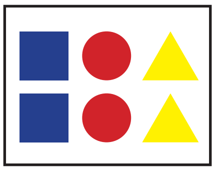
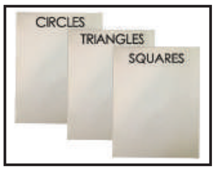
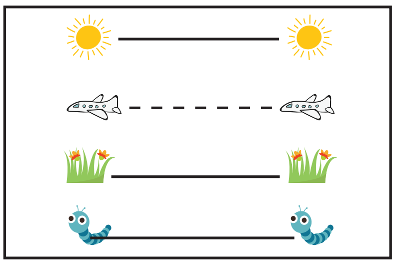
Lesson 15 Overview

OUTCOMES	STUDENT VOCABULARY:
Students will: • Identify the month, day, and date • Count from 1 to 6 • Use five frames to recognize quantities 1-6 • Count objects to tell how many there are to the number 6 • Sort objects by shape	• Circle • Compare • Left • Right • Sort • Square • Triangle

LESSON PREPARATION FOR THE TEACHER

- Have available the full five frame from Day 12.
- Create or print out one blank five frame (for the teacher).
- Create or print out 2 five frames per student. (Be sure to collect for reuse.)
- Color and cut out 1 circle to use as a new dot on the five frame.
- Gather sets of 6 counting objects (one set per student). Examples: beans, dry pasta, buttons, stones, math counters, blocks, connecting cubes)
- Draw and cut out 2 circles, 2 triangles, and 2 squares out of paper for the sorting activity. All of the shapes should be the same color and size.
- Label three sheets of paper (or construction paper or the chalkboard): Circles, Triangles, Squares. You will display these during the lesson after students have identified the categories for classification.

MATERIALS

Calendar Math Area		2 Five Frames (one full from previous lessons, one empty)	
1 circle to use as a dot on the five frame		Tape or glue stick	
2 Five Frames per student		Bags or cups of 6 counting objects (one set per student) (See Lesson Preparation for the Teacher for instructions and examples.)	
2 circles, 2 triangles, 2 squares		3 sheets of paper, labeled Circles, Triangles, Squares	
Sky Writing grid			

Calendar and Movement (15-20 mins)

Directions

1. **TEACHER SAY:** **It is Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days like your birthday and holidays.**

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: **Tell me everyone, what month are we in?**

STUDENTS DO: Say the month together.

TEACHER SAY: **Each square represents a day. All of the days in a row make up a week. Point to the week.**

STUDENTS DO: Point to the days in one week.

2. **TEACHER SAY:** **Let's say all of the days of the week together.**

STUDENTS DO: Say the days of the week with the teacher.

TEACHER SAY: **Now I want to find the square on the calendar that represents today. Can you point to it?**

STUDENTS DO: Point to today.

TEACHER SAY: **Did you point to this square? This square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now you say the date.**

STUDENTS DO: Say the date together.

3. **TEACHER SAY:** **Let's do Movement Math! First, I will stand and lean to the left to say 1, lean forward to say 2, lean to the right to say 3, lean backward to say 4, and jump to say 5. Left, forward, right, backward, jump! Watch me and join in when you understand the pattern.**

TEACHER DO: Repeat the pattern several times until all students have joined in.

STUDENTS DO: Follow the movement pattern while counting.

TEACHER SAY: **Good job with your counting and moving! Have a seat and give your brain a high five.**

TEACHER DO: Pat head.

STUDENTS DO: Pat their heads.

Learn (25-30 mins)

Directions

1. **TEACHER SAY:** **We just counted to 5, but I think you are ready for the next number. Does anyone know what 1 more than 5 is? Raise your hands if you think you know.**

STUDENTS DO: Raise hands to answer.

TEACHER DO: Call on a student with a raised hand.

TEACHER SAY: **One more than 5 is 6! Let's see how many 6 is.**

TEACHER DO: Display a full five frame.

TEACHER SAY: How many dots are in this five frame? How do you know?

STUDENTS DO: Raise hands to answer the question. Selected student answers and explains how they know.

TEACHER SAY: I want to show 6 dots using my five frame. Can I add 1 more dot to this five frame to show 6?

STUDENTS DO: Call out answer: No.

TEACHER DO: Select a student who said no.

STUDENTS DO: Selected student explains why 1 more dot cannot be added to the five frame.

TEACHER DO: Add the blank five frame. Add a new dot to the new five frame.

2. TEACHER SAY: Count these dots with me.

STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: Now our five frames show 6! We need two 5 frames to show 6 because 6 is 1 more than 5.

Note for the Teacher: Be sure to keep the five frames for upcoming lessons.

3. TEACHER SAY: Now it is your turn to practice showing 6.

TEACHER DO: Hand out two blank five frames and a set of counters to each student.

TEACHER SAY: I gave you two five frames and 6 counters. Practice showing 6 by putting 1 counter on each square of your five frames. Then count the counters.

STUDENTS DO: Put counters on five frames. Count the counters.

TEACHER SAY: Show your Shoulder Partner your work. Practice counting to 6 together.

STUDENTS DO: Show their work to their partners. Count to 6 with their partners.

TEACHER DO: Collect five frames and counters.

4. TEACHER SAY: I have some objects I would like you to help me sort. Let's take a look.

TEACHER DO: Hold up each shape and ask students to name them.

STUDENTS DO: Respond together, naming the shapes.

TEACHER SAY: Great! I have more circles, triangles, and squares here. How do you think we should sort these items?

TEACHER DO: Take out the shapes and display them so students can see them. Have an open conversation with students about how to sort them.

TEACHER SAY: We have three different shapes, so let's sort them by shape.

TEACHER DO: Display the three labeled papers (with shape drawings to support non-readers): Circles, Triangles, Squares. Read the words aloud and point to the pictures. Take out tape.

TEACHER SAY: When I call your name I want you to come up and take a shape and put it in the right group. Use the tape to attach the shape to the paper. You may ask for help if you need it.

TEACHER DO: Use **Calling Sticks** to select students one at a time to come up and sort shapes.

STUDENTS DO: Selected students take shapes and tape them to the correct paper (circles on the Circles paper and so on).

TEACHER SAY: **How many circles do we have?**

STUDENTS DO: Respond together: 2.

TEACHER DO: Repeat for triangles and squares.

TEACHER SAY: **Great job! We sorted these items by shape and counted them!**

Share (5 mins)

Directions

1. **TEACHER SAY:** **Think about what we have done in math today. Please talk to your Shoulder Partner and tell them what was your favorite part of class and why.**

STUDENTS DO: **Shoulder partners** share their favorite parts of class and tell why they liked it.

TEACHER SAY: **Now I will use the Calling Sticks and ask 3 people to share what they talked about with their Shoulder Partner.**

TEACHER DO: Pull 3 **Calling Sticks** . Allow students time to share. Take note of students who have a strong understanding of the skills and concepts they are learning and students who will need additional instruction.

Lesson 16 Overview

OUTCOMES

Students will:
- Identify the month, day, and date
- Count from 1 to 6
- Sky write number 6
- Count objects to tell how many there are up to 6
- Sort objects by shape and color

STUDENT VOCABULARY:

- Circle
- Compare
- Six
- Sort
- Square
- Triangle

LESSON PREPARATION FOR THE TEACHER

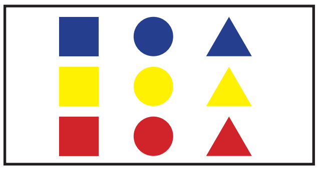
- Draw, color, and cut out 1 red triangle, 1 red triangle, 1 blue circle, 1 blue square, 1 yellow triangle, and 1 yellow square. All of the shapes should be the same size.
- Label three sheets of paper (or construction paper or the chalkboard): Circles, Triangles, Squares. You will display these during the lesson after students have identified the categories for classification.
- Label three sheets of paper (or construction paper or the chalkboard): Red, Blue, Yellow. You will display these during the lesson after students have identified the categories for classification.

MATERIALS

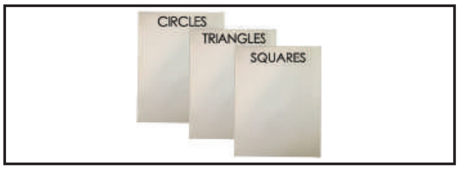
Calendar Math Area



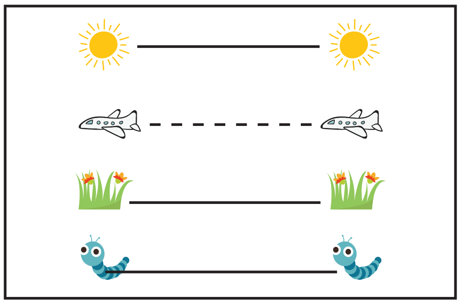
1 red circle and 1 red triangle
1 blue circle and 1 blue square
1 yellow triangle and 1 yellow square



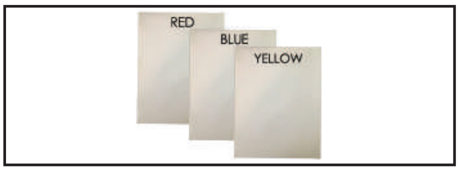
3 sheets of paper, labeled Circles, Triangles, Squares



Sky Writing grid



3 sheets of paper, labeled Red, Blue, Yellow



Tape



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: **It is Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days like your birthday and holidays.**

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: **Give me a smile if you remember what month we are in?**

STUDENT DO: Give teacher a smile.

TEACHER SAY: **What month are we in?**

STUDENTS DO: Respond together: current month.

TEACHER SAY: **Each square on the calendar is a day. All the days in a row make up the week. Say all of the days of the week with me.**

STUDENTS DO: Say the days of the week with the teacher.

TEACHER SAY: **Marvelous! Raise your hand if you can point to the square that is today?**

STUDENTS DO: Raise hands to show they know the answer.

TEACHER DO: Choose a student with their hand up to come point to the square that represents today.

TEACHER SAY: **Nice job! Today is (day) the (number date) of (month) (year). Now you say the date.**

STUDENTS DO: Repeat the date.

TEACHER SAY: **Great!**

2. TEACHER SAY: **Let's do Movement Math! Stand up and make sure you have room.**

STUDENTS DO: Stand up.

TEACHER DO: Give the movement directions below (or substitute movements you prefer). Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY:
- **Pretend you are a flamingo and stand on 1 leg.**
- **Pretend you are a frog and hop 2 times.**
- **Pretend you are a bird. Spread your wings and flap them 3 times.**
- **Blow 4 big bubbles.**
- **Do 5 jumping jacks.**
- **March in place 6 times.**

STUDENTS DO: Follow each direction, doing each movement the correct number of times.

TEACHER SAY: **Very good imaginations! Give your brain a high five.**

TEACHER DO: Pat head.

STUDENTS DO: Pat heads.

Learn (25-30 mins)

Directions

1. TEACHER DO: Display five frames from previous lesson that show 6.

TEACHER SAY: Yesterday, you learned the number 6! Help me count to 6 as I point to the dots on our five frames.

TEACHER DO: Point to each dot on the five frames and count aloud.

STUDENTS DO: Count aloud to 6 with the teacher.

TEACHER SAY: Great job!

2. TEACHER DO: Write a 6 on the board.

TEACHER SAY: This is what 6 looks like! Let's learn how to Sky write the number 6. First, I will write while you watch. I will say the steps aloud so you can say them with me when it is your turn.

TEACHER DO: Sky write the number 6 while saying steps aloud.

STUDENTS DO: Observe.

TEACHER SAY: What number did I write?

STUDENTS Do: Respond together: 6.

TEACHER SAY: Stand up and get your Sky Writing arms ready.

STUDENTS DO: Stand and hold out a straight arm with two fingers pointing.

TEACHER SAY: Let's write. Say the steps aloud with me as you write. We will practice a few times.

TEACHER DO: Sky write the number 6, saying steps slowly aloud.

STUDENTS DO: Sky write 6 repeating the steps aloud.

TEACHER DO: Practice 2-3 times.

3. TEACHER DO: Transition to sorting. Have all shapes, signs, and tape available.

TEACHER SAY: Does anyone remember how we sorted objects yesterday?

STUDENTS DO: Raise hands to volunteer. Selected student answers: By shape.

TEACHER SAY: Yes, by shape! I am going to show you some new objects and I want you to think about how you want to sort them. Don't say anything yet! Just think.

TEACHER DO: Take out the shapes and display them so students can see them. Give students about 1 minute to think.

STUDENTS DO: Think about how the objects could be sorted.

TEACHER SAY: Raise your hand if you think you know how the shapes could be sorted.

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students with raised hands to share their thinking.

STUDENTS DO: Identify shape and color as categories for sorting.

TEACHER SAY: Can we sort these shapes in more than one way?

STUDENTS DO: Respond together: Yes.

TEACHER SAY: Yes, we can sort them by shape or by color. Let's try shape first. When I call your name, come up and sort shapes. You will tape the shape to the paper as we did yesterday.

TEACHER DO: Display the three shape papers. Use **Calling Sticks** to call on students.

STUDENTS DO: When called on, take a shape and tape it to the correct shape paper.

TEACHER DO: When all shapes have been sorted, have students count to identify how many items are in each category.

TEACHER SAY: How many circles do we have?

STUDENTS DO: Respond together: 2.

TEACHER DO: Repeat for triangles and squares. Then, take the shapes back down and display the color papers. Repeat the sorting steps to have students sort the shapes by color.

STUDENTS DO: When called on, take a shape and tape it to the correct color paper.

TEACHER DO: When all shapes have been sorted, have students count to identify how many items are in each category.

TEACHER SAY: How many red shapes do we have?

STUDENTS DO: Respond together: 2.

TEACHER DO: Repeat for blue and yellow.

TEACHER SAY: You did a great job sorting and counting today! Nice work!

Share (5 mins)

Directions

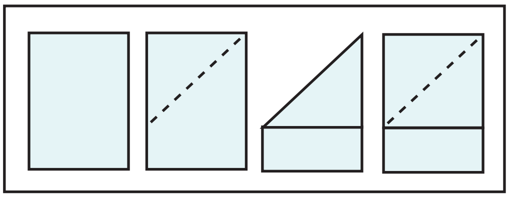
1. **TEACHER SAY: Think about what we have done in math today. Please talk to your Shoulder Partner and tell them what was your favorite part of class and why.**

STUDENTS DO: Shoulder partners share their favorite parts of class and tell why they liked it.

TEACHER SAY: Now I will use the Calling Sticks and ask 3 people to share what they talked about with their Shoulder Partner.

TEACHER DO: Pull 3 **Calling Sticks** . Allow students time to share. Take note of students who have a strong understanding of the skills and concepts they are learning and students who will need additional instruction.

Lesson 17 Overview



OUTCOMES

Students will:
- Identify the month, day, and date
- Count from 1 to 6
- Sky write numbers 1-6
- Create a dot card for 6
- Sort objects by shape and color

STUDENT VOCABULARY:

- Circle
- Compare
- Six
- Sort
- Square
- Triangle

LESSON PREPARATION FOR THE TEACHER

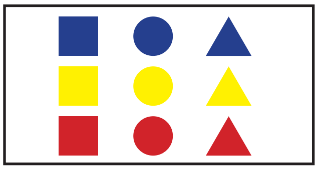
- Prepare 1 square per student so that they can make their own dot cards. If you do not have squares, use paper and cut them into squares using the steps shown in the previous lessons.
- Students need 6 dot stickers to make their card (or markers to draw them).
- Draw, color, and cut out 1 red circle, 1 blue circle, 1 yellow circle, 1 red triangle, 1 blue triangle, 1 yellow triangle, 1 red square, 1 blue square, and 1 yellow square for the classification activity. All of the shapes should be the same size.
- Label three sheets of paper (or construction paper or the chalkboard): Circles, Triangles, Squares. You will display these during the lesson after students have identified the categories for classification.
- Label three sheets of paper (or construction paper or the chalkboard): Red, Blue, Yellow. You will display these during the lesson after students have identified the categories for classification

MATERIALS

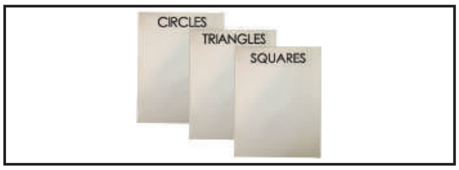
Calendar Math Area



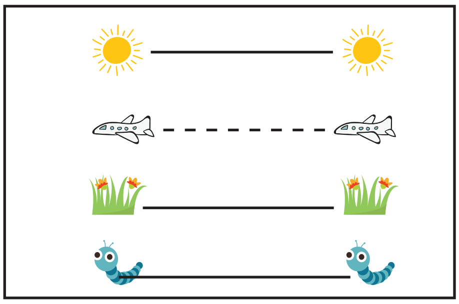
1 red circle, 1 blue circle, 1 yellow circle, 1 red triangle, 1 blue triangle, 1 yellow triangle, 1 red square, 1 blue square, and 1 yellow square



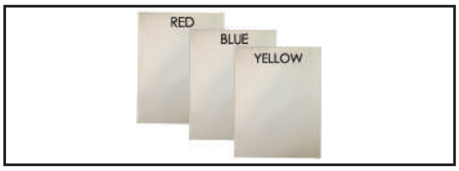
3 sheets of paper, labeled Circles, Triangles, Squares



Sky Writing grid



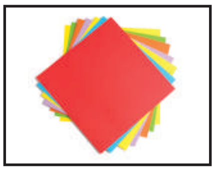
3 sheets of paper, labeled Red, Blue, Yellow



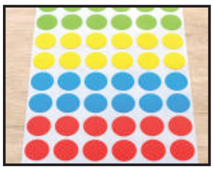
Tape



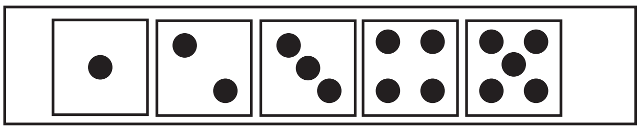
1 square of paper per student



6 dots per student (or markers for students to make their own dots)



Students' Dot Cards (1-5)



Calendar and Movement (15-20 mins)

Directions

1. **TEACHER SAY: It is Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days like your birthday and holidays.**

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Tell me everyone, what month are we in?

STUDENTS DO: Say the month together.

TEACHER SAY: Remember, the squares represent the days. All of the days in a row make up a week. Point to the days of the week.

STUDENTS DO: Point to the days of the week.

TEACHER SAY: Let's say all of the days of the week together.

STUDENTS DO: Say the days of the week with the teacher.

TEACHER SAY: Now I want to find the square on the calendar that represents today. Can you point to it?

STUDENTS DO: Point to today.

TEACHER SAY: Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now you say the date.

STUDENTS DO: Say the date together.

2. **TEACHER SAY: Let's do Movement Math! We will count to 6. First, I will stand and lean to the left to say 1, lean forward to say 2, lean to the right to say 3, lean backward to say 4, squat down to say 5, and jump up to say 6! Left, forward, right, backward, squat down, jump! Watch me and join in when you understand the pattern.**

TEACHER DO: Repeat the pattern several times until all students have joined in.

STUDENTS DO: Follow the movement pattern while counting.

TEACHER SAY: Good job with your counting and moving! Have a seat and give your brain a high five.

TEACHER DO: Pat head.

STUDENTS DO: Pat their head.

Learn (25-30 mins)

Directions

1. **TEACHER SAY: Yesterday, we learned how to Sky Write the number 6. Let's practice Sky Writing all the numbers we know from 1 to 6. Stand up and get your Sky Writing arms ready.**

STUDENTS DO: Stand and hold out a straight arm with two fingers pointing.

TEACHER SAY: Sky writing arms ready? Let's sky write.

TEACHER DO: Sky write numbers 1 to 6, saying steps aloud.

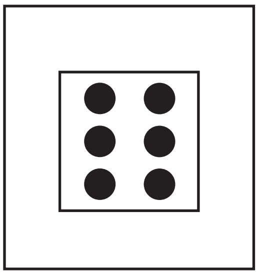
STUDENTS DO: Sky write 1 to 6 with the teacher, saying the steps aloud.

TEACHER DO: If time allows, practice once more with students.

2. TEACHER SAY: We already made dot cards for numbers 1 through 5. Today, we're going to add a 6 dot card to our sets.

TEACHER DO: Hand out squares and dots or markers.

TEACHER SAY: Watch me as I show you how to make a pattern for 6 on your dot card.



TEACHER DO: Draw a large square on the board. Draw the 6 dot pattern in the square.

STUDENTS DO: Observe, then make their own 6 dot cards.

TEACHER DO: As students work, hand out their 1-5 dot cards (if you have been storing them). Monitor students' progress and offer help as needed. For students who need extra support, consider having them work with a partner who can help them.

TEACHER SAY: Soon, you will work with a partner using your dot cards. Please put your new 6 dot card with your other dot cards and ______ (put them away/I will collect them).

STUDENTS DO: Put cards away or prepare them for collection.

3. TEACHER SAY: Does anyone remember how we sorted objects in our last math lesson?

STUDENTS DO: Raise hands to volunteer. Selected student answers: By shape and color.

TEACHER SAY: Yes, by shape and color! We're going to sort again by shape and color today, but I have more shapes in my collection, so I will need your help!
Let's try shape first. When I call your name, come up and sort by shape. You will tape the shape to the paper as we did yesterday.

TEACHER DO: Display the three shape papers. Call on students to come up and sort. Try to select students who did not help sort in the previous lesson.

STUDENTS DO: When called on, take a shape and tape it to the correct shape paper.

TEACHER DO: When all shapes have been sorted, have students count to identify how many items are in each category.

TEACHER SAY: How many circles do we have?

STUDENTS DO: Respond together: 3.

TEACHER DO: Repeat for triangles and squares. Then, take the shapes back down and display the color papers. Repeat the sorting steps to have students sort the shapes by color.

STUDENTS DO: When called on, take a shape and tape it to the correct color paper.

TEACHER DO: When all shapes have been sorted, have students count to identify how many items are in each category.

TEACHER SAY: How many red shapes do we have?

STUDENTS DO: Respond together: 2.

TEACHER DO: Repeat for blue and yellow.

TEACHER SAY: You did a wonderful job sorting and counting today!

Share (5 mins)

Directions

1. **TEACHER SAY: Talk to your Shoulder Partner about what you know about using dot cards.**

STUDENTS DO: Talk to their **Shoulder partners** about what they learned about using dot cards.

TEACHER DO: Give ample time to talk and then use an **Attention Getting Signal**.

TEACHER SAY: Now I will use the Calling Sticks and ask 3 people to share what they talked about with their Shoulder Partner.

TEACHER DO: Pull 3 **Calling sticks**. Allow students time to share. Take note of students who demonstrate strong understanding and those who may need additional practice.

Lesson 18 Overview

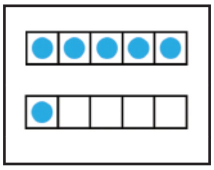
OUTCOMES	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date • Count from 1 to 7 • Use five frames to recognize quantities 1-7 • Count objects to tell how many there are to the number 7	• Color and cut out 1 circle to use as a dot on the five frame. • Create or print out 2 five frames (one set per student). Or, reuse the frames you created for previous lessons. • Gather sets of 7 counting objects (one set per student). Examples: beans, dry pasta, buttons, stones, math counters, blocks, connecting cubes)

MATERIALS

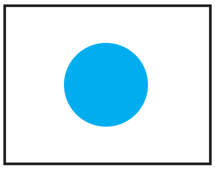
Calendar Math Area



2 Five Frames (one full from previous lessons, one with 1 dot)



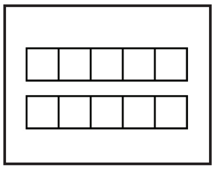
1 circle to use as a dot on the five frame



Tape or glue stick



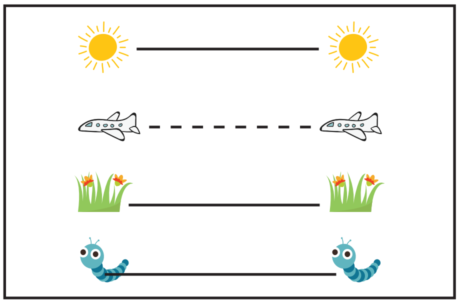
2 Five Frames per student



Sets of 7 counting objects (one set per student) (See Lesson Preparation for the Teacher for instructions and examples.)



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. **TEACHER SAY: It is Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days like your birthday and holidays.**

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: What month are we in?

STUDENTS DO: Say the month together.

TEACHER SAY: Remember, the squares represent the days and all of the days in a row make up a week. Point to the days of the week.

STUDENTS DO: Point to the days of the week.

TEACHER SAY: Let's say all of the days of the week together.

STUDENTS DO: Say the days of the week with the teacher.

TEACHER SAY: Now I want to find the square on the calendar that represents today. Can you point to it?

STUDENTS DO: Point to today.

TEACHER SAY: Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now you say the date.

STUDENTS DO: Say the date together.

2. TEACHER SAY: Let's do Movement Math! We will count to 6. I am going to give you a different direction for each number, so listen carefully!

TEACHER DO: Give the movement directions below (or substitute movements you prefer). Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY:

- **Pretend you are a flamingo and stand on 1 leg.**
- **Pretend you are a frog and hop 2 times.**
- **Pretend you are a chicken. Tuck your hands in your underarms and flap your chicken wings 3 times.**
- **Blink 4 times.**
- **Hop on one foot 5 times.**
- **Jump 6 times.**

STUDENTS DO: Follow each direction, doing each movement the correct number of times.

TEACHER SAY: Very good! Give yourself a pat on the back!

TEACHER DO: Pat back.

STUDENTS DO: Pat back.

Learn (25-30 mins)

Directions

1. TEACHER SAY: Let's practice Sky Writing our numbers together. Stand and get your Sky Writing arms ready. Write with me.

STUDENTS DO: Stand and get ready to sky write.

TEACHER DO: Sky write numbers 1 through 6 with the students, saying the directions for each number aloud.

STUDENTS DO: Sky write numbers 1 through 6 with the teacher, saying the directions for each number aloud.

2. TEACHER SAY: We just counted to 6, but I think you are ready for the next number. Does anyone know what 1 more than 6 is? Raise your hands if you think you know.

STUDENTS DO: Raise hands to answer.

TEACHER DO: Call on a student with a raised hand.

TEACHER SAY: **One more than 6 is 7! Let's see how many 7 is.**

TEACHER DO: Display the five frames from Day 15 (showing 6 dots).

TEACHER SAY: **How many dots are in these five frames? How do you know?**

STUDENTS DO: Raise hands to answer the question. Selected student answers and explains how they know.

TEACHER SAY: **I want to show 7 dots using my five frames. What should I do?**

STUDENTS DO: Call out answer: Add a dot.

TEACHER DO: Add a new dot to the second five frame.

3. TEACHER SAY: **Count these dots with me.**

STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: **Now our five frames show 7! Six and 1 more is 7.**

TEACHER DO: Keep the five frames for upcoming lessons.

4. TEACHER SAY: **Now it is your turn to practice showing 7.**

TEACHER DO: Hand out two blank five frames and a set of counters to each student.

TEACHER SAY: **I gave you two five frames and 7 counters. Practice showing 7 by putting 1 counter on each square of your five frames. Then count the counters.**

STUDENTS DO: Put counters on five frames. Count the counters.

TEACHER SAY: **Show your Shoulder Partner your work. Practice counting to 7 together.**

STUDENTS DO: Show their work to their partners. Count to 7 with their partners.

TEACHER DO: Collect five frames and counters.

Share (5 mins)

Directions

1. TEACHER SAY: **We have been learning so much about numbers, shapes, sorting, comparing, and patterns. I am curious to know if you are noticing or talking about these things outside of school. I will give you a moment to think.**

STUDENTS DO: Reflect on the teacher's question.

TEACHER SAY: **Give me a thumbs up if you would like to share today. We will not have time for everyone to share, but I will call on as many of you as I can.**

STUDENTS DO: Give a thumbs up to volunteer.

TEACHER DO: Call on students to share how they are noticing, talking about, or using their math skills and concepts outside of school.

TEACHER SAY: **That was very exciting! I love hearing about how you use math outside of school! I cannot wait to talk about it again!**

Lesson 19 Overview

OUTCOMES

Students will:
- Identify the month, day, and date
- Count from 1 to 7
- Sky write number 7
- Count objects to tell how many there are up to 7
- Demonstrate understanding of the relationship between number and quantity

STUDENT VOCABULARY:

- Patterns

LESSON PREPARATION FOR THE TEACHER

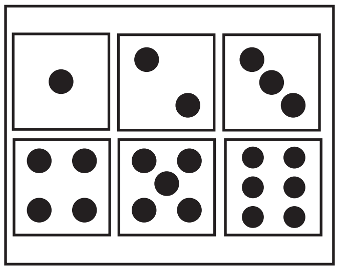
- No new materials needed.

MATERIALS

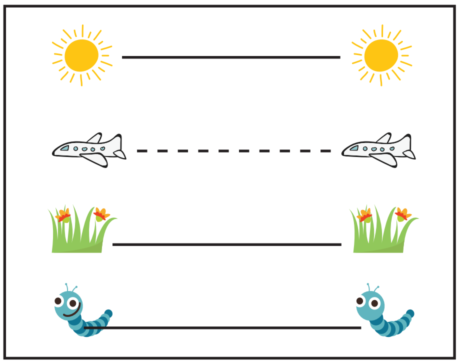
Calendar Math area



Large Dot Cards (Teacher set)



Sky Writing Grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: It is Calendar time!

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Tell me everyone, what month are we in?

STUDENTS DO: Say the month together.

TEACHER SAY: Each square on the calendar represents 1 day. All of the days in a row make up a week. Point to the days of the week.

STUDENTS DO: Point to the days in one week.

2. TEACHER SAY: Let's say all of the days of the week together.

STUDENTS DO: Say the names of the days of the week together

3. TEACHER SAY: Now I want to find the square on the calendar that represents today. Can you point to it?

STUDENTS DO: Point to today.

TEACHER SAY: Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now you say the date.

STUDENTS DO: Say the date together.

4. TEACHER SAY: Let's move around! Stand up make sure you have room for Movement Math.

STUDENTS DO: Stand up.

TEACHER DO: Give the movement directions below (or substitute movements you prefer). Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY: I am going to give you direction and a number of times to do it. Listen carefully!

- **Touch your toes 1 time.**
- **Hop on one foot 2 times.**
- **Pretend you are a frog on a lily pad. Squat down low. Now hop 3 times.**
- **Pretend you are in the army. Stand straight and tall and march in place 4 times.**
- **Now we're in a boat. Grab your paddle and row 5 times.**
- **Pretend there is a tall lemon tree. Now reach up as high as you can and pick 6 lemons. Reach very high!**
- **Have a seat. Pretend you have a big pot of yummy soup and we will stir it 7 times.**

STUDENTS DO: Follow each direction, doing each movement the correct number of times

TEACHER SAY: Very good imaginations! Give your brain a high five.

TEACHER DO: Pat head.

STUDENTS DO: Pat their head.

Learn (25-30 mins)

Directions

1. TEACHER SAY: In our last math lesson, we learned about the number 7. Now, let's learn how to Sky Write it.

TEACHER DO: Write a 7 on the board.

TEACHER SAY: This is what 7 looks like! Watch and listen as I Sky Write 7. I will say the steps aloud so you can say them with me when it is your turn.

TEACHER DO: Sky write the number 7 while saying steps aloud.

STUDENTS DO: Observe.

TEACHER SAY: What number did I write?

STUDENTS Do: Respond together: 7.

TEACHER SAY: Stand up and get your Sky Writing arms ready.

STUDENTS DO: Stand and hold out a straight arm with two fingers pointing.

TEACHER SAY: Let's write. Say the steps aloud with me as you write.

TEACHER DO: Sky write the number 7 saying steps slowly aloud.

STUDENTS DO: Sky write 7 repeating the steps aloud.

TEACHER DO: Practice 2-3 times.

2. TEACHER DO: Take out your set of large dot cards.

TEACHER SAY: Today we are going to take a look at our dot cards and talk about the patterns together. Let's see if we can use the dot patterns to help us know how many dots are on the card without counting.

TEACHER DO: Display the 1 dot card.

TEACHER SAY: How many dots are on this card? Where is the dot?

TEACHER DO: Use **Calling Sticks** to choose a student to answer.

TEACHER DO: Display the 2 dot card next to the 1 dot card.

TEACHER SAY: How many dots are on this card? Where are the dots?

TEACHER DO: Use **Calling Sticks** to choose a student to answer.

TEACHER DO: Display the 3 dot next to the 1 and 2 cards.

TEACHER SAY: How many dots are on this card? Where are the dots?

TEACHER DO: Use **Calling Sticks** to choose a student to answer.

TEACHER SAY: Good! The dots go from corner to corner with a dot in the middle.

TEACHER DO: Repeat for the 4, 5, and 6 dot cards, asking students to tell how many dots the cards show and to describe the pattern.

TEACHER SAY: You did a great job talking about the dot patterns for each card. Let me ask you a different question.

3. TEACHER DO: Hold up the 5 dot card, count the dots aloud as you touch them, and review the pattern – 1 dot in each corner and 1 in the middle.

TEACHER SAY: If you see this pattern, can it be 6 dots?

STUDENTS DO: Respond together: No. (Listen for students who say yes or who do not answer.)

TEACHER SAY: Can it be 4 dots?

STUDENTS DO: Respond together: No. (Listen for students who say yes or who do not answer.)

TEACHER SAY: Why not?

STUDENTS DO: Raise hands to respond (or respond as you prefer).

4. TEACHER SAY: So let's try this out. I am going to mix these cards up and show you one card at a time for a few seconds. You tell me how many dots are on the card. See if you can use the patterns to help you!

TEACHER DO: Show a dot card for 3 seconds.

STUDENTS DO: Call out the answer.

TEACHER DO: Confirm the answer. Repeat for the remaining cards.

TEACHER SAY: You did a great job! Remember, we are still learning. Someday, I will show you these cards and you will know how many dots are on them without counting!

Share (5 mins)

Directions

1. **TEACHER SAY: We've made dot cards for numbers 1, 2, 3, 4, 5, and 6. What is happening to our dot cards every time we make a new one? Turn to your Shoulder Partner and talk about your thinking.**

STUDENTS DO: Shoulder partners share.

TEACHER DO: Give ample time for **Shoulder Partners** to share, then give **Attention Getting Signal**.

TEACHER SAY: Now I will use the Calling Sticks and ask 3 people to share what they talked about with their Shoulder Partner.

TEACHER DO: Pull three **Calling sticks**. Allow students time to share.

Lesson 20 Overview

OUTCOMES

Students will:

- Identify the month, day, and date
- Count from 1 to 7
- Sky write numbers 1-7
- Create a dot card for 7
- Use geometric shapes to create pictures

STUDENT VOCABULARY:

- Circles
- Rectangles
- Squares
- Triangles

LESSON PREPARATION FOR THE TEACHER

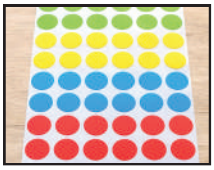
- Prepare 1 square per student so that they can make their own dot card.
- Students will need 7 dot stickers each (or markers to draw them).
- Gather materials for students to use as they create their art projects, including large sheets of paper for them to trace, glue, draw, and color on and construction/colored/white paper to trace on and cut.

MATERIALS

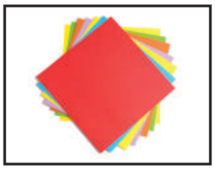
Calendar Math Area



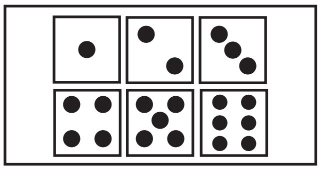
7 dots per student (or markers for students to make their own dots)



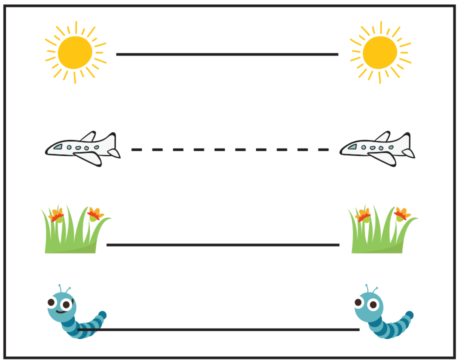
1 square of paper per student



Students' Dot Cards (1-6)



Sky writing grid



Materials for students' art projects, collected since Day 11:

- Large sheets of paper (one per student)
- Construction/colored paper
- White paper
- Traceable cardboard shapes
- Recyclable/reusable objects
- Crayons
- Markers
- Glue

Calendar and Movement (15 mins)

Directions

1. **TEACHER SAY: It is Calendar time!**

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: What month are we in?

STUDENTS DO: Say the month together.

TEACHER SAY: Each square on the calendar represents 1 day. All of the days in a row make up a week. Point to the days of the week.

STUDENTS DO: Point to the days in one week.

2. **TEACHER SAY: Let's say all of the days of the week together.**

STUDENTS DO: Say the names of the days of the week together

3. **TEACHER SAY: Now I want to find the square on the calendar that represents today. Can you point to it?**

STUDENTS DO: Point to today.

TEACHER SAY: Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now you say the date.

STUDENTS DO: Say the date together.

4. **TEACHER SAY: Let's move around! Today we are going to do a quick counting and movement pattern. We will reach for the sky and touch our toes as we count like this.**

TEACHER DO: Say 1 and reach up, say 2 and touch your toes, say 3 and reach up, say 4 and touch your toes.

TEACHER SAY: I am going to start over. Stand up and make sure you have room for Movement Math. Do the pattern with me.

STUDENTS DO: Stand up and do the counting and movement pattern with the teacher.

TEACHER SAY: Great job! Stay standing, please.

Learn (40 mins)

Directions

1. **TEACHER SAY: Before we sit down, let's practice Sky Writing our numbers together. Get your Sky Writing arms ready. Write with me.**

STUDENTS DO: Stand and get ready to sky write.

TEACHER DO: Sky write numbers 1 through 7 with the students, saying the directions for each number aloud.

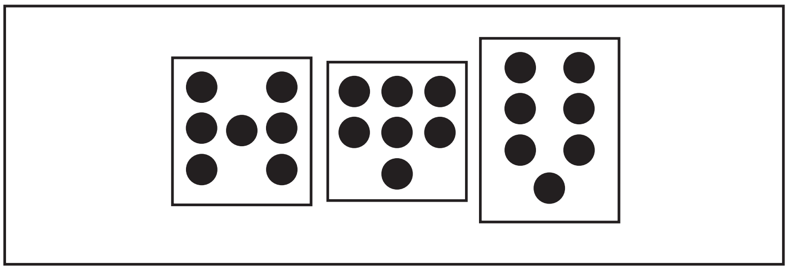
STUDENTS DO: Sky write numbers 1 through 7 with the teacher, saying the directions for each number aloud.

2. **TEACHER SAY: We already made dot cards for numbers 1 through 6. Today, we're going to add a 7 dot card to our sets.**

TEACHER DO: Hand out squares and dots or markers.

TEACHER SAY: Watch me as I show you how to make a pattern for 7 on your dot card.

TEACHER DO: Draw a large square on the board. Draw a 7 dot pattern in the square. Options are show. You can select a pattern for all students to draw or show them all three and let each student pick the one that works for them.



STUDENTS DO: Observe, then make their own 7 dot cards.

TEACHER DO: As students work, hand out their 1-6 dot cards (if you have been storing them). Monitor students' progress and offer help as needed. For students who need extra support, consider having them work with a partner who can help them.

TEACHER SAY: Tomorrow, we will add another dot card to our set. Please put your new 7 dot card with your other dot cards and ______ (put them away/I will collect them).

STUDENTS DO: Put cards away or prepare them for collection.

3. TEACHER SAY: Today is a very special day! We've been preparing for the last several days for our art project, collecting materials and learning about shapes. Today, you are going to use the materials we have here to create a picture using circles, squares, triangles, and rectangles. Your picture can be of anything you like, but we should see those shapes in your final picture. You will have about 30 minutes to work on your picture.

TEACHER DO: Determine how you will have students access and use materials (at their tables or in a central location?). Establish rules and guidelines for using and organizing them. Walk around to monitor students' work, offer help, and answer questions, as needed.

STUDENTS DO: Work on art projects.

Share (5 mins)

Directions

1. TEACHER SAY: I would like to hear about how you used shapes in your art projects. Raise your hand if you would like to share.

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students with hands raised. Allow students a few minutes to talk about how they used shapes in their art projects. When art projects are dry/ready, display them in the classroom or hallway.

KINDERGARTEN I

Mathematics

CHAPTER 3

Lessons 21-30

Overview

Lessons 21-30

COMPONENT	DESCRIPTION	TIME
Calendar and Movement	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills. Students explore quantity and practice counting through patterns and movement.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from colleagues' perspectives.	5-10 minutes

Learning Indicators

Throughout this Chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY:
- Count objects to tell how many there are.
- Count by ones from 0 to 10.
- Read and write numerals from 0 to 10.
- Understand the relationship between numbers and quantities to five.
- Represent a number (0-10) by producing a set of objects or pictures.
- Identify the number of objects in familiar groupings without counting.
- Apply the understanding that each successive number name refers to a quantity that is one larger as they count.
- Understand the concepts of greater than, less than, and equal to with up to 5 objects.
- Compare two numbers between 1 and 10 presented as objects, drawings, etc.

MEASUREMENT:
- Compare orally between length and weight and size using longer than/shorter than, heavier/lighter, bigger/smaller.
- Classify objects into given categories (for example length, weight, size, color) and sort categories by count.

GEOMETRY:
- Describe objects in the environment using names of shapes.
- Correctly name 2-dimensional shapes (triangle, circle, rectangle, square).

Day 21-30 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
21	**Students will:** • Identify the month, day, and date • Count from 1 to 8 • Use five frames to recognize quantities 1-8 • Count objects to tell how many there are to the number 8
22	**Students will:** • Identify the month, day, and date • Count from 1 to 8 • Sky write number 8 • Count objects to tell how many there are up to 8 • Demonstrate understanding of the relationship between number and quantity
23	**Students will:** • Identify the month, day, and date • Count from 1 to 8 • Sky write numbers 1-8 • Count objects to tell how many there are to the number 8 • Create a dot card for 8
24	**Students will:** • Identify the month, day, and date • Count from 1 to 9 • Use five frames to recognize quantities 1-9 • Count objects to tell how many there are to the number 9
25	**Students will:** • Identify the month, day, and date • Count from 1 to 9 • Sky write number 9 • Count objects to tell how many there are up to 9 • Demonstrate understanding of the relationship between number and quantity
26	**Students will:** • Identify the month, day, and date • Count from 1 to 9 • Sky write numbers 1-9 • Count objects to tell how many there are to the number 9 • Create a dot card for 9
27	**Students will:** • Identify the month, day, and date • Count from 1 to 10 • Use five frames to recognize quantities 1-10 • Count objects to tell how many there are to the number 10

LESSON	INSTRUCTIONAL FOCUS
28	**Students will:** • Identify the month, day, and date • Count from 1 to 10 • Sky write number 10 • Count objects to tell how many there are up to 10 • Demonstrate understanding of the relationship between number and quantity
29	**Students will:** • Identify the month, day, and date • Count from 1 to 10 • Sky write numbers 1-10 • Count objects to tell how many there are to the number 10 • Create a dot card for 10
30	**Students will:** • Participate in Calendar Math • Count from 1 to 10 • Count objects to tell how many there are to 10 • Demonstrate understanding of the relationship between number and quantity

Chapter Preparation for the Teacher

Day 30: Celebrating 10

- On Day 30, students will celebrate the number 10. They will engage in fun activities in which they explore number concepts, counting, and quantities to 10. The lesson includes descriptions of each activity along with directions for creating them and materials needed for each. It is suggested that you read the lesson in advance and begin to prepare as early as possible. It may be helpful to ask volunteers to donate time and materials to support the celebration.
    - Consider making 2-3 copies of each activity so multiple students can play the same games. You will use them throughout the year.
    - Think about how you would like to organize and store the activities so the pieces stay together and students can access them independently after Day 30.
    - Materials needed for the activities: wooden clothespins (the kind that open and close), empty cereal boxes, markers and paint, scissors, hole punch, clean cardboard egg cartons, chenille stems (pipe cleaners), construction paper, butcher paper or wrapping paper, large wooden blocks or interlocking building blocks (like Duplo Legos), ice cube trays, empty tissue boxes (cube shape), baking trays or plastic trays, bag of clean sand or salt, paper clips, tape, glue, ruler or straight edge

Lesson 21 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count from 1 to 8
- Use five frames to recognize quantities 1-8
- Count objects to tell how many there are to the number 8

STUDENT VOCABULARY

- Less
- More
- Eight

LESSON PREPARATION FOR THE TEACHER

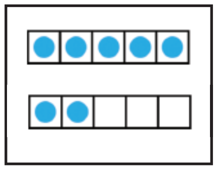
- Color and cut out 1 circle to use as dots on the five frame.
- Create or print out 2 five frames (one set per student). Or, reuse the frames you created for previous lessons.
- Gather bags or cups of 8 counting objects (one set per student). Examples: beans, dry pasta, buttons, stones, math counters, blocks, connecting cubes)

MATERIALS

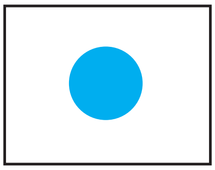
Calendar Math Area



2 Five Frames (from Day 18)



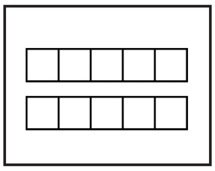
1 circle to use as a dot on the five frame



Tape or glue stick



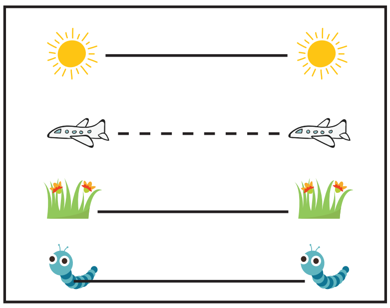
2 Five Frames per student



Bags or cups of 8 counting objects (one set per student) (See Lesson Preparation for the Teacher for instructions and examples.)



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: **Let's move around! Stand up and make sure you have room for Movement Math.**

STUDENTS DO: Stand up.

TEACHER DO: Give the movement directions below (or substitute movements you prefer). Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY: **I am going to give you a direction and a number of times to do it. Listen carefully!**

- Nod your head 1 time.
- **Oh, there is a pesky mosquito! Clap your hands 2 times.**
- **Pretend you are a horse eating a carrot. Take 3 big bites.**
- **Now we are in a boat. Grab your paddle and row 4 times.**
- **What a sweet kitten! Pet the kitten 5 times.**
- **Look at those fluffy clouds. Reach up and pull down 6 of them!**
- **Wow, you just blew 7 big bubbles! Pop all 7 of them!**

STUDENTS DO: Follow each direction, doing each movement the correct number of times

TEACHER SAY: **Very good imaginations! Give yourself a pat on the back.**

TEACHER DO: Pat back.

STUDENTS DO: Pat their backs.

Learn (25-30 mins)

Directions

1. TEACHER SAY: **Let's practice Sky Writing our numbers together. Stand and get your Sky Writing arms ready. Write with me.**

STUDENTS DO: Stand and get ready to sky write.

TEACHER DO: Sky write numbers 1 through 7 with the students, saying the directions for each number aloud.

STUDENTS DO: Sky write numbers 1 through 7 with the teacher, saying the directions for each number aloud.

2. TEACHER SAY: **Great job counting to 7! Today, we are going to learn the next number. Does anyone know what 1 more than 7 is? Raise your hands if you think you know.**

STUDENTS DO: Raise hands to answer.

TEACHER DO: Call on a student with a raised hand.

TEACHER SAY: **One more than 7 is 8! Let's see how many 8 is.**

TEACHER DO: Display the five frames from Day 15 (showing 7 dots).

TEACHER SAY: **How many dots are in these five frames? How do you know?**

STUDENTS DO: Raise hands to answer the question. Selected student answers and explains how they know.

TEACHER SAY: I want to show 8 dots using my five frames. What should I do?

STUDENTS DO: Call out answer: Add a dot.

TEACHER DO: Add a new dot to the second five frame.

3. TEACHER SAY: Count these dots with me.

STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: Now our five frames show 8! Seven and 1 more is 8.

TEACHER DO: Keep the five frames for upcoming lessons.

4. TEACHER SAY: Now it is your turn to practice showing 8.

TEACHER DO: Hand out two blank five frames and a set of counters to each student.

TEACHER SAY: I gave you a five frame and 8 counters. Practice showing 8 by putting 1 counter on each square of your five frames. Then count the counters.

STUDENTS DO: Put counters on five frames. Count the counters.

TEACHER SAY: Show your Shoulder Partner your work. Practice counting to 8 together.

STUDENTS DO: Show their work to their partners. Count to 8 with their partners.

TEACHER DO: Collect five frames and counters.

Share (5 mins)

Directions

1. TEACHER SAY: Sometimes people do not like to talk about mistakes or even admit they have made them. But mistakes are important because we can learn from them. Have you ever made mistakes in math before? Raise your hand if you have.

STUDENTS DO: Raise hands to show they have made a mistake.

TEACHER DO: Raise your hand to show that everyone makes mistakes.

TEACHER SAY: One thing I have noticed is that when I tell people about a mistake I've made, they have often made the same mistake and then we learn from each other! Tell me about a math mistake you have made (it does not have to be from today) and what you learned from it.

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on a student with a raised hand. Share a personal (real or fictional) story of you making a mistake to encourage students to share.

STUDENTS DO: Share their experiences with making mistakes.

Lesson 22 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count from 1 to 8
- Sky write number 8
- Count objects to tell how many there are up to 8
- Sort objects by color and size

STUDENT VOCABULARY:

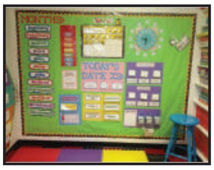
- Circle
- Sort
- Square
- Triangle

LESSON PREPARATION FOR THE TEACHER

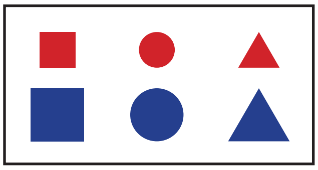
- Draw, color, and cut out 1 small circle, 1 small triangle, 1 small square, 1 big circle, 1 big triangle, and 1 big square. All of the shapes should be the same color.
- Label three sheets of paper (or construction paper or the chalkboard): Circles, Triangles, Squares. You will display these during the lesson after students have identified the categories for classification.
- Label two sheets of paper (or construction paper or the chalkboard): Small and Big. You will display these during the lesson after students have identified the categories for classification.

MATERIALS

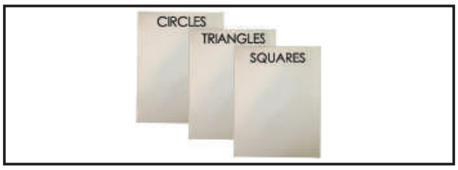
Calendar Math Area



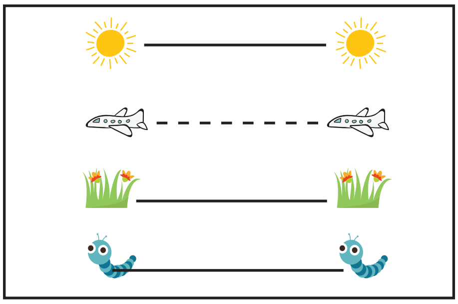
1 small circle, 1 small triangle and 1 small square
1 big circle, 1 big triangle, and 1 big square



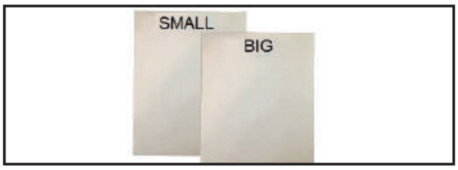
3 sheets of paper, labeled Circles, Triangles, Squares



Sky Writing grid



2 sheets of paper, labeled Small and Big (with pictures to help students understand the concepts)



Tape



Calendar and Movement (15-20 mins)

Directions

Note for the Teacher: At this point, most students should have mastered calendar time. Calendar time will gradually transition from teacher-led to student-led with minimal teacher guidance. However, if the student called upon does not know the answer or is too shy to speak, tell them they can ask a colleague to help. Ask students to raise a hand if they know the answer and can tell their friend. The student helper then calls on a colleague to say the answer and then repeats what their colleague said.

1. TEACHER SAY: **It's Calendar time!**

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: **Tell me everyone, what month are we in?**

STUDENTS DO: Say the month together.

TEACHER SAY: **Each square on the calendar represents 1 day. All of the days in a row make up a week. Point to the days of the week.**

STUDENTS DO: Point to the days in one week.

TEACHER SAY: **Let's say all of the days of the week together.**

STUDENTS DO: Say the names of the days of the week together

TEACHER SAY: **Now I want to find the square on the calendar that represents today. Can you point to it?**

STUDENTS DO: Point to today.

TEACHER SAY: **Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now you say the date.**

STUDENTS DO: Say the date together.

2. TEACHER SAY: **Let's do Movement Math! First, I will stand and lean to the left to count 1, lean forward to count 2, lean to the right to count 3, lean backward to count 4, and do it all again to count 5, 6, 7, and 8. Left, forward, right, backward, left, forward, right, backward! Watch me and join in when you understand the pattern.**

TEACHER DO: Repeat the pattern several times until all students have joined in.

STUDENTS DO: Follow the movement pattern while counting.

TEACHER SAY: **Good job with your counting and moving! Give your Shoulder Partner a high five. Do not sit down yet.**

STUDENTS DO: High five their **Shoulder Partner**s.

Learn (25-30 mins)

Directions

1. TEACHER DO: Display five frames from previous lesson that show 8.

TEACHER SAY: **Yesterday, you learned the number 8! Help me count to 8 as I point to the dots on our five frames.**

TEACHER DO: Point to each dot on the five frames and count aloud.

STUDENTS DO: Count aloud to 8 with the teacher.

TEACHER SAY: **Great job!**

2. TEACHER DO: Write an 8 on the board.

TEACHER SAY: **This is what 8 looks like! Let's learn how to Sky write the number 8. First, I will write while you watch. I will say the steps aloud so you can say them with me when it is your turn.**

TEACHER DO: Sky write the number 8 while saying steps aloud.

STUDENTS DO: Observe.

TEACHER SAY: **What number did I write?**

STUDENTS Do: Respond together: 8.

TEACHER SAY: **Stand up and get your Sky Writing arms ready.**

STUDENTS DO: Stand and hold out a straight arm with two fingers pointing.

TEACHER SAY: **Let's write. Say the steps aloud with me as you write. We will practice a few times.**

TEACHER DO: Sky write the number 8, saying steps slowly aloud.

STUDENTS DO: Sky write 8 repeating the steps aloud.

TEACHER DO: Practice 2-3 times.

3. TEACHER DO: Transition to sorting. Have all shapes, signs, and tape available.

TEACHER SAY: **The last time we sorted objects, we sorted them by shape and color. I have some new objects for you to sort. I'm going to show them to you and I want you to think about how you want to sort them. Don't say anything yet! Just think.**

TEACHER DO: Take out the shapes and display them so students can see them. Give students about 30 seconds to think.

STUDENTS DO: Think about how the objects could be sorted.

TEACHER SAY: **Raise your hand if you think you know how the shapes could be sorted.**

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students with raised hands to share their thinking. Call on several students until they have identified shape and color as categories for sorting.

TEACHER SAY: **Can we sort these shapes in more than one way?**

STUDENTS DO: Respond together: Yes.

TEACHER SAY: **Yes, we can sort them by shape or by size. Let's try shape first. When I call your name, come up and sort shapes. You will tape the shape to the paper.**

TEACHER DO: Display the three shape papers. Use **Calling Sticks** to call on students.

STUDENTS DO: When called on, take a shape and tape it to the correct shape paper.

TEACHER DO: When all shapes have been sorted, have students count to identify how many items are in each category.

TEACHER SAY: How many circles do we have?

STUDENTS DO: Respond together: 2.

TEACHER DO: Repeat for triangles and squares. Then, take the shapes down and display the size papers. Repeat the sorting steps to have students sort the shapes by size.

STUDENTS DO: When called on, take a shape and tape it to the correct size paper.

TEACHER DO: When all shapes have been sorted, have students count to identify how many items are in each category.

TEACHER SAY: How many small shapes do we have?

STUDENTS DO: Respond together: 3.

TEACHER DO: Repeat for big shapes.

TEACHER SAY: You did a wonderful job sorting and counting today!

Share (5 mins)

Directions

1. **TEACHER SAY: Think about what we have done in math today. Please talk to your Shoulder Partner and tell them what was your favorite part of class and why.**

STUDENTS DO: Shoulder partners share their favorite parts of class and tell why they liked it.

TEACHER SAY: Now I will use the Calling Sticks and ask 3 people to share what they talked about with their Shoulder Partner.

TEACHER DO: Pull three **Calling sticks**. Allow students time to share.

Lesson 23 Overview

OUTCOMES

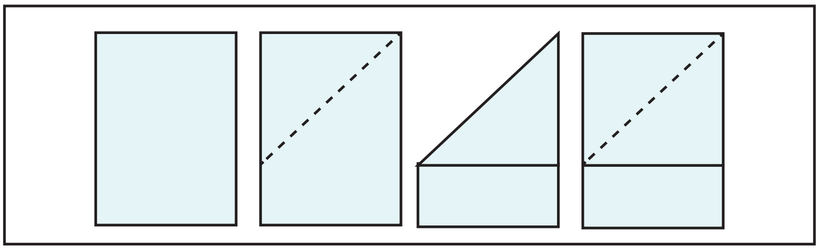
Students will:
- Participate in Calendar Math activities
- Count from 1 to 8
- Sky write numbers 1-8
- Count objects to tell how many there are to the number 8
- Create a dot card for 8

STUDENT VOCABULARY:

- No new vocabulary. Review vocabulary as needed.

LESSON PREPARATION FOR THE TEACHER

- Prepare 1 square per student so that they can make their own dot cards.
- Students need 8 dot stickers to make their card (or markers to draw them).

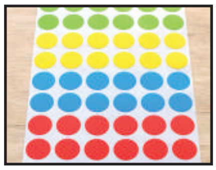


MATERIALS

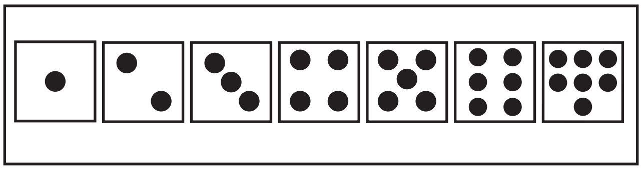
Calendar Math area



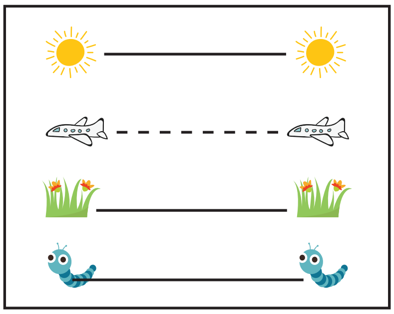
6 dots per student (or markers for students to make their own dots)



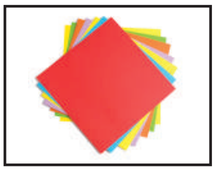
Students' Dot Cards (1-7)



Sky Writing grid



1 square of paper per student



Calendar and Movement (15-20 mins)

Directions

1. **TEACHER SAY: It's Calendar time! Who can tell us how the calendar helps us? Give a thumbs up.**

STUDENTS DO: Give a thumbs up to volunteer.

TEACHER DO: Call on students with thumbs up to explain how the calendar helps us.

STUDENTS DO: Explain that the calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days like your birthday and holidays.

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Tell me everyone, what month are we in?

STUDENTS DO: Say the month together.

2. **TEACHER SAY: Lean & Whisper to your Shoulder Partner: What shape on the calendar represents the days?**

STUDENTS DO: Lean and whisper "squares" to their **Shoulder Partner**.

TEACHER SAY: Everyone say it out loud: What shape represents a day on a calendar?

STUDENTS DO: Say "square" together.

TEACHER SAY: The squares represent the days. And what does a row of squares represent? Give me another thumbs up if you know.

STUDENTS DO: Give a thumbs up if they know.

TEACHER DO: Call on students with thumbs up to explain that a row of squares represents a week.

TEACHER SAY: Let's stand up and say all of the days of the week together.

STUDENTS DO: Stand and say the days of the week together.

TEACHER SAY: Who can come up and point to today's square? Give me a thumbs up.

STUDENTS DO: Give a thumbs up to volunteer.

TEACHER DO: Call on a student with a thumb up.

STUDENTS DO: Selected student comes up and points to today's square.

TEACHER SAY: Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now you say the date.

STUDENTS DO: Repeat the date.

3. **TEACHER SAY: Let's do Movement Math! Today, we'll do a quick pattern. First I will stand, count 1 and touch the bottom of the Nile, count 2 and touch the tops of the pyramids, count 3 and touch the bottom of the Nile, count 4 and touch the tops of the pyramids, and so on until 8. Watch me and join in when you understand the pattern.**

TEACHER DO: Model the pattern. Repeat several times until all students have joined in.

STUDENTS DO: Follow the counting and movement pattern.

Learn (25-30 mins)

Directions

1. **TEACHER SAY: Yesterday, we learned how to Sky Write the number 8. Let's practice Sky Writing all the numbers we know from 1 to 8. Stand up and get your Sky Writing arms ready.**

STUDENTS DO: Stand and hold out a straight arm with two fingers pointing.

TEACHER SAY: Sky writing arms ready? Let's sky write.

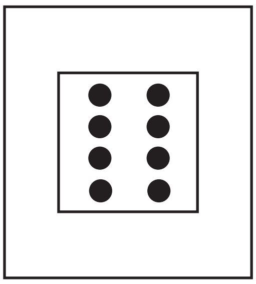
TEACHER DO: Sky write numbers 1 to 8, saying steps aloud.

STUDENTS DO: Sky write 1 to 8 with the teacher, saying the steps aloud.

TEACHER DO: If time allows, practice once more with students.

2. **TEACHER SAY: So far, we have made dot cards for numbers 1 through 7. Today, we're going to add an 8 dot card to our sets.**

TEACHER DO: Hand out squares and dots or markers.



TEACHER SAY: Watch me as I show you how to make a pattern for 8 on your dot card.

TEACHER DO: Draw a large square on the board. Draw the 8 dot pattern in the square.

STUDENTS DO: Observe, then make their own 8 dot cards.

TEACHER DO: As students work, hand out their 1-7 dot cards (if you have been storing them). Monitor students' progress and offer help as needed. For students who need extra support, consider having them work with a partner who can help them.

3. **TEACHER SAY: It has been a while since we practiced using our dot cards. Today, I want you to work with your Shoulder Partner. Take turns showing each other a dot card. When your partner shows you a dot card, count the dots, then clap that many times.**

TEACHER DO: If necessary, model how to do the activity and answer any questions students have.

STUDENTS DO: Practice counting and clapping dot card quantities with their partners.

TEACHER DO: Walk around the classroom and monitor students as they work with their partners. Take note of students who may need additional support and students who may be able to help other students. Collect the dot card sets (or ask students to put them away).

Share (5 mins)

Directions

1. **TEACHER SAY: What did you learn from your dot card practice today? I am going to use Calling Sticks to call on you, so I'm going to give you a minute to think.**

STUDENTS DO: Think for a moment about what they learned from their dot card practices.

TEACHER DO: Use **Calling Sticks** to select students to share their learning.

STUDENTS DO: When called on, students will share their learning. Take note of possible misconceptions and advanced insights.

Lesson 24 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count from 1 to 9
- Use five frames to recognize quantities 1-9
- Count objects to tell how many there are to the number 9
- Demonstrate understanding of the relationship between number and quantity

STUDENT VOCABULARY

- Less
- More
- Nine

LESSON PREPARATION FOR THE TEACHER

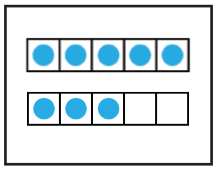
- Color and cut out 1 circle to use as a dot on the five frame.
- Create or print out 2 five frames (one set per student). Or, reuse the frames you created for previous lessons.
- Gather sets of 9 counting objects (one set per student). Examples: beans, dry pasta, buttons, stones, math counters, blocks, connecting cubes
- Students need 8 dot stickers to make their card (or markers to draw them).

MATERIALS

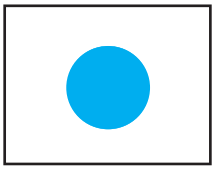
Calendar Math Area



2 Five Frames (from previous lessons)



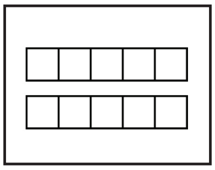
1 circle to use as a dot on the five frame



Tape or glue



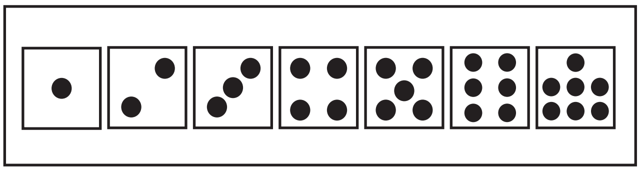
2 Five Frames per student



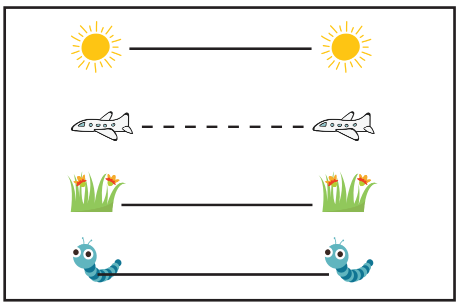
Sets of 9 counting objects (one set per student) (See Lesson Preparation for the Teacher for instructions and examples.)



Large Dot Cards 1-8 (Teacher set)



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. **TEACHER SAY: It's Calendar time! Who can tell us how the calendar helps us? Give a thumbs up.**

STUDENTS DO: Give a thumbs up to volunteer.

TEACHER DO: Call on students with thumbs up to explain how the calendar helps us.

STUDENTS DO: Explain that the calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days like your birthday and holidays.

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Tell me everyone, what month are we in?

STUDENTS DO: Say the month together.

2. **TEACHER SAY: Lean & Whisper to your Shoulder Partner: What shape on the calendar represents the days?**

STUDENTS DO: Lean and whisper "squares" to their **Shoulder Partner**.

TEACHER SAY: Everyone say it out loud: What shape represents a day on a calendar?

STUDENTS DO: Say "square" together.

TEACHER SAY: The squares represent the days. And what does a row of squares represent? Give me another thumbs up if you know.

STUDENTS DO: Give a thumbs up if they know.

TEACHER DO: Call on students with thumbs up to explain that a row of squares represents a week.

TEACHER SAY: Let's stand up and say all of the days of the week together.

STUDENTS DO: Stand and say the days of the week together.

TEACHER SAY: Who can come up and point to today's square? Give me a thumbs up.

STUDENTS DO: Give a thumbs up to volunteer.

TEACHER DO: Call on a student with a thumb up.

STUDENTS DO: Selected student comes up and points to today's square.

TEACHER SAY: Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now you say the date.

STUDENTS DO: Repeat the date.

TEACHER SAY: Let's do Movement Math together! Today, we'll get a little exercise.

TEACHER DO: Give the movement directions below (or substitute movements you prefer). Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY: I am going to give you a direction and a number of times to do it. Listen carefully!

- **Stretch 1 time.**
- **Touch your toes 2 times.**

- **Hop on one foot 3 times.**
- **Hop on your other foot 4 times.**
- **Pretend you are holding heavy weights in your hands and do 5 arm curls.**
- **Twist side to side 6 times.**
- **Do 8 jumping jacks.**

STUDENTS DO: Follow each direction, doing each movement the correct number of times

TEACHER SAY: **Very good imaginations! Give yourself a pat on the back.**

TEACHER DO: Pat back.

STUDENTS DO: Pat their backs.

Learn (25-30 mins)

Directions

1. TEACHER SAY: **Let's practice Sky Writing our numbers together. Stand and get your Sky Writing arms ready. Write with me.**

STUDENTS DO: Stand and get ready to sky write.

TEACHER DO: Sky write numbers 1 through 8 with the students, saying the directions for each number aloud.

STUDENTS DO: Sky write numbers 1 through 8 with the teacher, saying the directions for each number aloud.

2. TEACHER SAY: **We have spent a few days learning about 8 and all the numbers from 1 to 8, and I think you are ready for the next number. Hold up your hands and show me 8 fingers.**

STUDENTS DO: Hold up hands and show 8 fingers.

TEACHER SAY: **Wow, great job! Now put 1 more finger up – just 1! Does anyone know what 1 more than 8 is? Nod your head if you think you know.**

STUDENTS DO: Nod heads if they think they know the answer.

TEACHER DO: Call on students who are nodding their heads.

TEACHER SAY: **One more than 8 is 9! Look at your fingers. That's how many 9 is! Put your hands down and let's look at 9 on our five frames.**

TEACHER DO: Display the five frames from Day 21 (showing 8 dots).

TEACHER SAY: **How many dots are in these five frames? How do you know?**

STUDENTS DO: Raise hands to answer the question. Selected student answers and explains how they know.

TEACHER DO: Count the dots aloud with the students.

TEACHER SAY: **There are 8 dots in our five frames now, but I want to show 9 dots. What should I do?**

STUDENTS DO: Call out answer: Add a dot.

TEACHER DO: Add a new dot to the second five frame.

3. TEACHER SAY: **Count the dots with me again.**

STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: Now our five frames show 9! Eight and 1 more is 9.

TEACHER DO: Keep the five frames for upcoming lessons.

4. TEACHER SAY: Now it is your turn to practice showing 9.

TEACHER DO: Hand out two blank five frames and a set of counters to each student.

TEACHER SAY: I gave you two five frames and 9 counters. Practice showing 9 by putting 1 counter on each square of your five frames. Then count the counters.

STUDENTS DO: Put counters on five frames. Count the counters.

TEACHER SAY: Show your Shoulder Partner your work. Practice counting to 9 together.

STUDENTS DO: Show their work to their partners. Count to 9 with their partners.

5. TEACHER DO: Collect five frames and counters. If there is time left in the lesson, take out your large set of dot cards (1-8).

TEACHER SAY: Let's do a little practice with our dot cards. I am going to show you a dot card for 2-3 seconds. I want you to tell me how many dots are on the card. Try to use the strategy of recognizing patterns because you will not have time to count the dots every time! Before we get started, let's take a look at the patterns again.

TEACHER DO: Show each card 1-8 and briefly review the patterns. Then start showing students the cards. If they get frustrated, remind them we are practicing and they will get it. Show as many dot cards as time allows.

STUDENTS DO: View dot cards and try to determine without counting the quantity they show.

Share (5 mins)

Directions

1. TEACHER SAY: Have any of you been practicing counting at home? What kinds of things have you counted? Yesterday, I counted eggs to see how many I still have in my refrigerator. I would like to hear about your counting! Give me a thumbs up if you would like to share.

STUDENTS DO: Give a thumbs up if they would like to share.

TEACHER DO: Call on students with a thumb up. Take note of how students are using counting in their daily lives and of students who may not be apply mathematics outside of school. Consider how you can pair students to work together or assign simple and fun counting projects for students to do at home.

Lesson 25 Overview

OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 9 • Sky write number 9 • Count objects to tell how many there are up to 9 • Use objects to represent quantities	• No new vocabulary. Review vocabulary as needed.	• Gather materials for an art project: dry pasta (small, short noodles work best), glue, construction paper, paint, paint-brushes, clean-up materials like cups of water and towels.

MATERIALS

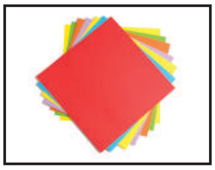
Calendar Math Area



Dry pasta (small macaroni-style noodles are best)



Construction paper (or white paper)



Glue



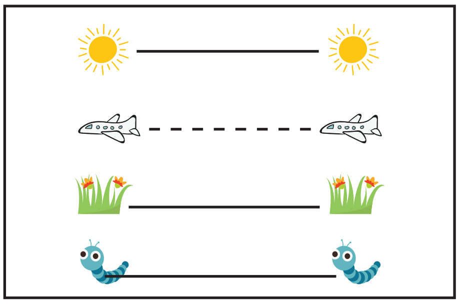
Paint and brushes, if available



Clean-up materials, such as cups of water and towels



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: It is Calendar time!

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Tell me everyone, what month are we in?

STUDENTS DO: Say the month together.

TEACHER SAY: Each square on the calendar represents 1 day. All of the days in a row make up a week. Point to the days of the week.

STUDENTS DO: Point to the days in one week.

2. TEACHER SAY: **Let's say all of the days of the week together.**

STUDENTS DO: Say the names of the days of the week together

3. TEACHER SAY: **Now I want to find the square on the calendar that represents today. Can you point to it?**

STUDENTS DO: Point to today.

TEACHER SAY: **Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now you say the date.**

STUDENTS DO: Say the date together.

4. TEACHER SAY: **Let's move around! Stand up and make sure you have room for Movement Math.**

STUDENTS DO: Stand up.

TEACHER DO: Give the movement directions below (or substitute movements you prefer). Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY: **Let's take our Movement Math to the zoo! I am going to give you a direction and a number of times to do it. Listen carefully!**

- **Stand on 1 leg like a flamingo.**
- **Pretend you are a lion and roar 2 times.**
- **Pretend you are a kangaroo. Jump 3 times.**
- **Pretend you are a crocodile. Use your arms to chomp down 4 times.**
- **Pretend you are a turtle. Stick your head out of your shell 5 times.**
- **Reach up and pull 6 beetles out the sky.**
- **Pretend you are an elephant and stomp 7 times.**
- **Pretend you are a giraffe and eat 8 leaves overhead.**
- **Pretend you are an eagle and flap your giant wings 9 times.**

STUDENTS DO: Follow each direction, doing each movement the correct number of times

TEACHER SAY: **Very good imaginations! Give your brain a high five.**

TEACHER DO: Pat head.

STUDENTS DO: Pat their heads.

Learn (25-30 mins)

Directions

1. TEACHER DO: Display five frames from previous lesson that show 9.

TEACHER SAY: **Yesterday, you learned the number 9! Help me count to 9 as I point to the dots on our five frames.**

TEACHER DO: Point to each dot on the five frames and count aloud.

STUDENTS DO: Count aloud to 9 with the teacher.

TEACHER SAY: **Great job! Can you show me 9 fingers on your hands again?**

STUDENTS DO: Show 9 fingers on their hands.

TEACHER SAY: Nice work!

2. TEACHER DO: Write a 9 on the board.

TEACHER SAY: This is what the number 9 looks like. Let's learn how to Sky write the number 9. First, I will write while you watch. I will say the steps aloud so you can say them with me when it is your turn.

TEACHER DO: Sky write the number 9 while saying steps aloud.

STUDENTS DO: Observe.

TEACHER SAY: What number did I write?

STUDENTS Do: Respond together: 9.

TEACHER SAY: Stand up and get your Sky Writing arms ready.

STUDENTS DO: Stand and hold out a straight arm with two fingers pointing.

TEACHER SAY: Let's write. Say the steps aloud with me as you write. We will practice a few times.

TEACHER DO: Sky write the number 9, saying steps slowly aloud.

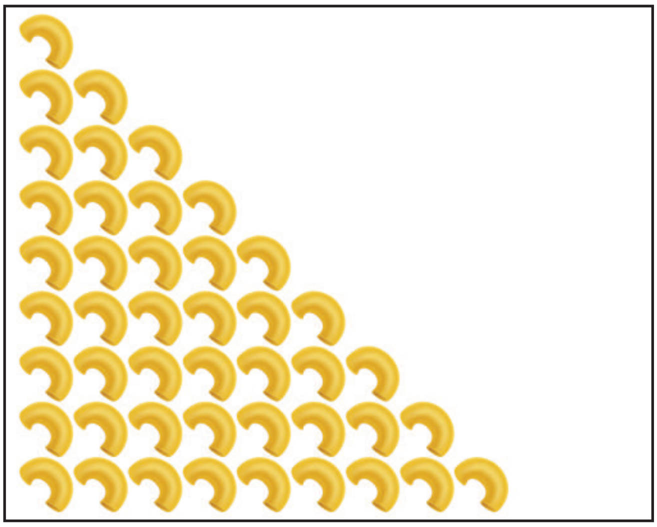
STUDENTS DO: Sky write 9 repeating the steps aloud.

TEACHER DO: Practice 2-3 times.

TEACHER SAY: Today, we're going to start an art project to show what we have learned about numbers and how much each number is worth.

TEACHER DO: In this art project, students will use dry pasta to demonstrate their understanding of quantity. Model for students how they will create the project: To represent 1, students will glue 1 piece of pasta to their large sheet of paper. To represent 2, students will glue 2 pieces of pasta to the paper under the 1 piece of pasta. To represent 3, students will glue 3 pieces of pasta to the paper under the 2 pieces of pasta.

Students should continue until they show all quantities through 9 as modeled below (though it is not expected that students' projects are perfectly straight and neat). Tell students to leave a row at the bottom for the next number. Optional: Have students paint the dry pasta. If painting before gluing, allow the paint to dry before gluing. If painting after gluing, allow the glue to dry before painting. Students may not have time to finish this project today. Continue over the next few days as needed (though it will not be noted in the Teacher's Guide).



STUDENTS DO: Work on math/art projects. Ask for help as needed.

Share (5 mins)

Directions

1. **TEACHER SAY: In our last math lesson, I asked if any of you have been practicing counting at home. Yesterday, when I went to the store, I counted 8 oranges to put in my bag. I would like to hear more about your counting! Give me a thumbs up if you would like to share.**

STUDENTS DO: Give a thumbs up if they would like to share.

TEACHER DO: Call on students with a thumb up. Take note of how students are using counting in their daily lives and of students who may not be apply mathematics outside of school. Consider how you can pair students to work together or assign simple and fun counting projects for students to do at home.

Lesson 26 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count from 1 to 9
- Sky write numbers 1-9
- Count objects to tell how many there are to the number 9
- Create a dot card for 9

STUDENT VOCABULARY

- No new vocabulary. Review vocabulary as needed.

LESSON PREPARATION FOR THE TEACHER

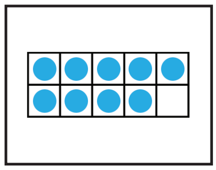
- Prepare 1 square per student so that they can make their own dot card.
- Students will need 9 dot stickers each (or markers to draw them).

MATERIALS

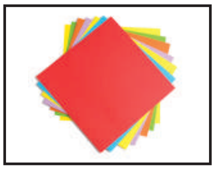
Calendar Math Area



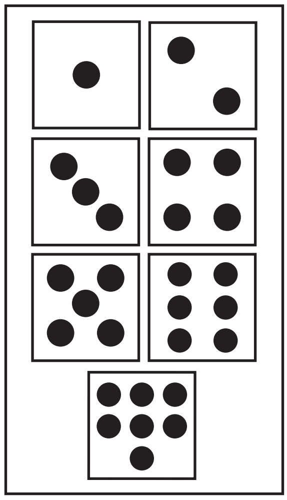
9 dots per student (or markers for students to make their own dots)



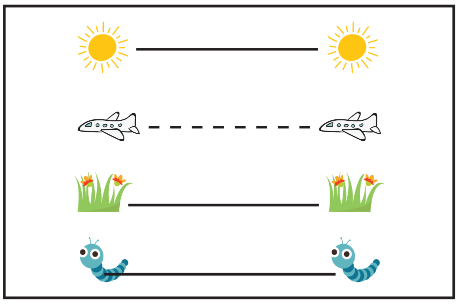
1 square of paper per student



Students' Dot Cards (1-8)



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. **TEACHER SAY: It's Calendar time! Who can tell us how the calendar helps us? Give a thumbs up.**

STUDENTS DO: Give a thumbs up to volunteer.

TEACHER DO: Call on students with thumbs up to explain how the calendar helps us.

STUDENTS DO: Explain that the calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days like your birthday and holidays.

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Tell me everyone, what month are we in?

STUDENTS DO: Say the month together.

2. TEACHER SAY: **Tell me: What shape on the calendar represents the days?**

STUDENTS DO: Respond together: square.

TEACHER SAY: **The squares represent the days. And what does a row of squares represent? Give me another thumbs up if you know.**

STUDENTS DO: Give a thumbs up if they know.

TEACHER DO: Call on students with thumbs up to explain that a row of squares represents a week.

TEACHER SAY: **Let's stand up and say all of the days of the week together.**

STUDENTS DO: Stand and say the days of the week together.

TEACHER SAY: **Who can come up and point to today's square? Give me a thumbs up.**

STUDENTS DO: Give a thumbs up to volunteer.

TEACHER DO: Call on a student with a thumb up.

STUDENTS DO: Selected student comes up and points to today's square.

TEACHER SAY: **Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now you say the date.**

STUDENTS DO: Repeat the date.

3. TEACHER SAY: **Let's do Movement Math! Today we'll visit a friend. Stand up and make sure you have room.**

STUDENTS DO: Stand up.

TEACHER DO: Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY:

- **Spin around 1 time.**
- **Pretend you are your friend's door and knock 2 times.**
- **They answered the door. Say hello 3 times.**
- **Your friend gives you hot tea. Hold it in your hand and blow on it 4 times.**
- **Now take 5 big sips. Then you can set the cup down.**
- **Tell your friend "thank you" 6 times.**
- **It's time to go, say goodbye and turn around 7 times.**
- **You had so much fun you wave your arms above your head 8 times.**

STUDENTS DO: Follow each direction, doing each movement the correct number of times

TEACHER SAY: **Wonderful! Give your neighbor a high five and have a seat.**

TEACHER DO: Pat head.

STUDENTS DO: Pat their heads and sit.

Learn (25-30 mins)

Directions

1. TEACHER SAY: In a moment we are going to Sky Write all the numbers we have learned so far. Before we do that, I'm going to Sky write a mystery number. See if you can guess the numbers I am Sky writing.

TEACHER DO: Sky write a familiar number between 1-9, saying the steps slowly out loud but not naming the number.

STUDENTS DO: Observe.

TEACHER SAY: What number did I write? Raise your hand if you think you know.

STUDENTS DO: Raise hands to answer.

TEACHER DO: Repeat this guessing game with two more numbers.

TEACHER SAY: Awesome! Now it's your turn to write. Sky writing arms ready? Let's write numbers 1-9!

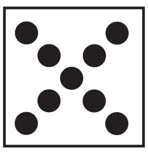
STUDENTS DO: Stand and hold out a straight arm with two fingers pointing.

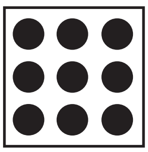
TEACHER DO: Lead students in **Sky Writing** the numbers one through nine 1-2 times before moving on.

2. TEACHER SAY: Let's add a 9 dot card to our sets.

TEACHER DO: Hand out squares and dots or markers.

TEACHER SAY: Watch me as I show you how to make a pattern for 9 on your dot card.





TEACHER DO: Draw a large square on the board. Draw a 9 dot pattern in the square. Options are shown. You can select a pattern for all students to draw or show them both and let each student pick the one that works for them.

STUDENTS DO: Observe, then make their own 9 dot cards.

TEACHER DO: As students work, hand out their 1-8 dot cards (if you have been storing them). Monitor students' progress and offer help as needed. For students who need extra support, consider having them work with a partner who can help them.

TEACHER SAY: Put your new 9 dot card with your other dot cards and ______ (put them away/I will collect them).

STUDENTS DO: Put cards away or prepare them for collection.

Share (5 mins)

Directions

1. TEACHER SAY: Think about what we have done in math today. Please talk to your Shoulder Partner and tell them what was your favorite part of class and why.

STUDENTS DO: Shoulder partners share favorite parts of class and tell why they liked it.

TEACHER SAY: Now I will use the Calling Sticks and ask 3 people to share what they talked about with their Shoulder Partner.

TEACHER DO: Pull three **Calling sticks**. Allow students time to share.

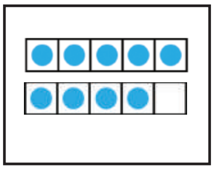
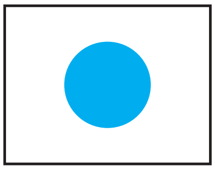
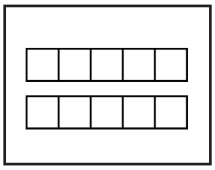
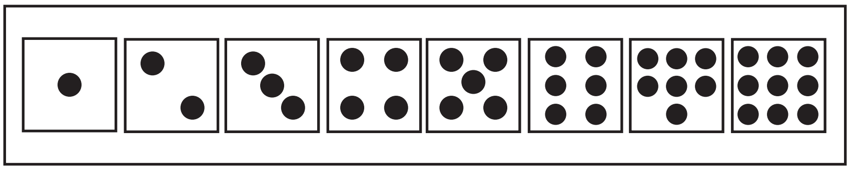
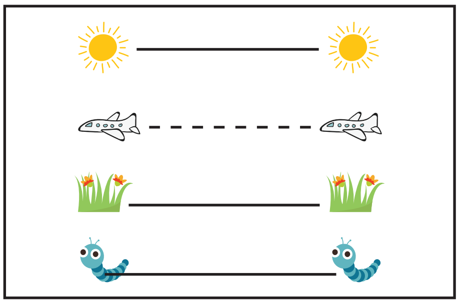
Lesson 27 Overview

OUTCOMES
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Use five frames to recognize quantities 1-10 • Count objects to tell how many there are to the number 10

STUDENT VOCABULARY
• Down • Ten • Up

LESSON PREPARATION FOR THE TEACHER
• Color and cut out 1 circle to use as a dot on the five frame. • Create or print out 2 five frames (one set per student). Or, reuse the frames you created for previous lessons. • Gather sets of 10 counting objects (one set per student). Examples: beans, dry pasta, buttons, stones, math counters, blocks, connecting cubes

MATERIALS

Calendar Math Area		2 Five Frames (from previous lessons)	
1 circle to use as a dot on the five frame		Tape or glue	
2 Five Frames per student		Sets of 10 counting objects (one set per student) (See Lesson Preparation for the Teacher for instructions and examples.)	
Large Dot Cards 1-9 (Teacher set)			
Sky Writing grid			

Calendar and Movement (15-20 mins)

Directions

1. **TEACHER SAY: It's Calendar time! Who can tell us how the calendar helps us? Give a thumbs up.**

STUDENTS DO: Give a thumbs up to volunteer.

TEACHER DO: Call on students with thumbs up to explain how the calendar helps us.

STUDENTS DO: Explain that the calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days like your birthday and holidays.

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: **Tell me everyone, what month are we in?**

STUDENTS DO: Say the month together.

2. TEACHER SAY: **Tell me: What shape on the calendar represents the days?**

STUDENTS DO: Respond together: square.

TEACHER SAY: **The squares represent the days. And what does a row of squares represent? Give me another thumbs up if you know.**

STUDENTS DO: Give a thumbs up if they know.

TEACHER DO: Call on students with thumbs up to explain that a row of squares represents a week.

TEACHER SAY: **Let's stand up and say all of the days of the week together.**

STUDENTS DO: Stand and say the days of the week together.

TEACHER SAY: **Who can come up and point to today's square? Give me a thumbs up.**

STUDENTS DO: Give a thumbs up to volunteer.

TEACHER DO: Call on a student with a thumb up.

STUDENTS DO: Selected student comes up and points to today's square.

TEACHER SAY: **Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now you say the date.**

STUDENTS DO: Repeat the date.

TEACHER SAY: **Let's do Movement Math! Today, let's reach up to the sky and down to our toes as we count. Watch me and join in once you know the pattern.**

TEACHER DO: Count 1 and reach up with both arms, count 2 and reach down to your toes, count 3 and reach up with both arms, count 4 and reach down to your toes. Continue counting and moving to 9.

STUDENTS DO: Follow the counting and movement pattern along with the teacher.

TEACHER SAY: **Great job! Give yourselves a pat on the back and stay standing.**

STUDENTS DO: Pat themselves on the back. Remain standing.

Learn (25-30 mins)

Directions

1. **TEACHER SAY: Let's practice Sky Writing our numbers together. Stand and get your Sky Writing arms ready. Write with me.**

STUDENTS DO: Stand and get ready to sky write.

TEACHER DO: Sky write numbers 1 through 9 with the students, saying the directions for each number aloud.

STUDENTS DO: Sky write numbers 1 through 9 with the teacher, saying the directions for each number aloud.

2. **TEACHER SAY: We have spent a few days learning about 9 and all the numbers from 1 to 9, and I think you are ready for the next number. It is a very special number and I am so excited that you are learning it today! Hold up your hands and show me 9 fingers.**

STUDENTS DO: Hold up hands and show 9 fingers.

TEACHER SAY: Now put 1 more finger up!

STUDENTS DO: Hold up 1 more finger.

TEACHER SAY: Wow! You have all of your fingers up! Do you know how many fingers you have?

STUDENTS DO: Respond together: 10 (if they know).

TEACHER SAY: We have 10 fingers. 10 is 1 more than 9. We are going to learn about 10 today! Put your hands down and let's look at 9 on our five frames.

3. **TEACHER SAY: We just counted to 9, but I think you are ready for the next number. Does anyone know what 1 more than 9 is? Raise your hands if you think you know.**

STUDENTS DO: Raise hands to answer.

TEACHER DO: Call on a student with a raised hand.

TEACHER SAY: One more than 9 is 10! Let's see how many 10 is.

TEACHER DO: Display the five frames from Day 24 (showing 9 dots).

TEACHER SAY: How many dots are in these five frames? How do you know?

STUDENTS DO: Raise hands to answer the question. Selected student answers and explains how they know.

TEACHER SAY: Count the dots with me.

STUDENTS DO: Count the dots aloud with the teacher.

TEACHER SAY: I want to show 10 dots using my five frames. What should I do?

STUDENTS DO: Call out answer: Add a dot.

TEACHER DO: Add a new dot to the second five frame.

4. **TEACHER SAY: Does anyone notice anything about our five frames? Tell me what you see.**

STUDENTS DO: Call out: They are full.

TEACHER SAY: They are full! Now we have TWO five frames. Count the dots with me.

STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: Good job! Two five frames make 10.

TEACHER DO: Keep the five frames for upcoming lessons.

5. TEACHER SAY: Now it is your turn to practice showing 10.

TEACHER DO: Hand out two blank five frames and a set of counters to each student.

TEACHER SAY: I gave you 2 five frames and 10 counters. Practice showing 10 by putting 1 counter on each square of your five frames. Then count the counters.

STUDENTS DO: Put counters on five frames. Count the counters.

TEACHER SAY: Show your Shoulder Partner your work. Practice counting to 10 together.

STUDENTS DO: Show their work to their partners. Count to 10 with their partners.

TEACHER DO: Collect five frames and counters.

TEACHER SAY: Give your partner a high five with your 10 fingers!

STUDENTS DO: Give their partners a high five.

TEACHER DO: If time allows, practice using dot cards 1-9 with students or have students work on their math art projects.

Share (5 mins)

Directions

1. TEACHER SAY: We have talked a lot about patterns and how they can help us know how many there are without counting. Think about what we have learned about 5 and 10. Now watch this.

TEACHER DO: Hold up 5 fingers for 1-2 seconds.

TEACHER SAY: How many was that? Call out if you know.

STUDENTS DO: Call out 5 if they know.

TEACHER DO: If no students call out, ask them how many fingers they have on their hands. Some students may still need to count them, but others may know they have 5 fingers.

TEACHER SAY: If I know I have 5 fingers on my hand, that helps me know how many this (flash hand again) is 5 without counting. Let's try another one. We just talked about this one today.

TEACHER DO: Hold up both hands for 1-2 seconds.

TEACHER SAY: How many was that? Call out if you know.

STUDENTS DO: Call out 10 if they know.

TEACHER DO: If no students call out, remind them that they held up two hands earlier and showed 10 fingers. They can count to prove it, if necessary.

TEACHER SAY: If I know I have 10 fingers all together, that helps me know how many this (flash hand again) is 10 without counting. Good job today! When you go home today, show someone what you learned.

Lesson 28 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count from 1 to 10
- Sky write number 10
- Count objects to tell how many there are up to 10
- Demonstrate understanding of the relationship between number and quantity

STUDENT VOCABULARY

- One-digit
- Ten
- Two-digit

LESSON PREPARATION FOR THE TEACHER

- Gather large sheets of paper (construction or white) for students to trace their hands on.
- Students will need coloring tools, such as crayons, markers, or paints.

MATERIALS

Calendar Math Area



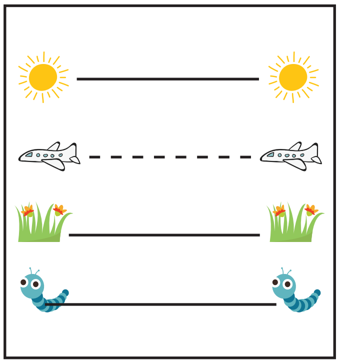
Crayons, markers, and/or paint and painting materials



Large sheets of paper (construction or white)



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: It is Calendar time!

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: If I point to you, tell me what month it is. If you are not sure, ask a colleague for help.

TEACHER DO: Point to a student.

STUDENTS DO: Selected student says the month or asks for help.

TEACHER SAY: All of the days in a row make up a week. If I point to you, come up and help lead us in saying the days of the week.

TEACHER DO: Point to a student.

STUDENTS DO: Selected student points to the days of the week. All students say the days of the week aloud.

TEACHER SAY: **If I point to you, come up and point to today on the calendar. If you are not sure, ask a colleague for help.**

TEACHER DO: Point to a student.

STUDENTS DO: Selected student points to today on the calendar or asks for help.

TEACHER SAY: **Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now all of you say the date.**

STUDENTS DO: Say the date together.

2. TEACHER SAY: **Let's move around! Stand up and make sure you have room for Movement Math.**

STUDENTS DO: Stand up.

TEACHER DO: Give the movement directions below (or substitute movements you prefer). Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY: **Let's do our Movement Math together. We will lean and jump. Watch me and join in when you are ready.**

TEACHER DO: Count 1 and lean to one side, count 2 and lean forward, count 3 and lean to the other side, count 4 and lean backward, count 5 and jump in the air, count 6 and lean to one side, count 7 and lean forward, count 8 and lean to the other side, count 9 and lean backward, count 10 and jump in the air.

STUDENTS DO: Follow each direction, joining in when they understand the pattern.

TEACHER SAY: **Good job! Give your brain a high five.**

TEACHER DO: Pat head.

STUDENTS DO: Pat their heads.

Learn (25-30 mins)

Directions

1. TEACHER DO: Display five frames from previous lesson that show 10.

TEACHER SAY: **Yesterday, you learned the number 10! Help me count to 10 as I point to the dots on our five frames.**

TEACHER DO: Point to each dot on the five frames and count aloud.

STUDENTS DO: Count aloud to 10 with the teacher.

TEACHER SAY: **Great job! Can you show me 10 fingers on your hands again?**

STUDENTS DO: Show 10 fingers on their hands.

TEACHER SAY: **Nice work!**

2. TEACHER DO: Write a 10 on the board.

TEACHER SAY: **This is what the number 10 looks like. Ten is a two-digit number. That means we have to use two numbers to write it – a 1 and a 0. All of the other numbers we have learned have been one-digit numbers. That means we only have to write 1 number – like 9.**

Let's learn how to Sky write the number 10. First, I will write while you watch. I will say the steps aloud so you can say them with me when it is your turn. Remember, we have to write two numbers to make the number 10.

TEACHER DO: Sky write the number 10 while saying steps aloud.

STUDENTS DO: Observe.

TEACHER SAY: What number did I write?

STUDENTS Do: Respond together: 10.

TEACHER SAY: Stand up and get your Sky Writing arms ready.

STUDENTS DO: Stand and hold out a straight arm with two fingers pointing.

TEACHER SAY: Let's write. Say the steps aloud with me as you write. We will practice a few times.

TEACHER DO: Sky write the number 10, saying steps slowly aloud.

STUDENTS DO: Sky write 10 repeating the steps aloud.

TEACHER DO: Practice 2-3 times.

3. TEACHER SAY: Let's make celebrate the number 10 by making a 10 art project. We are going to use something very handy to make 10. Our hands!

TEACHER DO: Hand out large paper and coloring tools.

TEACHER SAY: You will work with a partner to create your art projects. Put your hands on the paper and your partner will trace them. Then you will switch so you can trace your partner's hands can be traced. Watch me.

TEACHER DO: Put your hand on the board. Spread your fingers and trace your hand in chalk. Go slowly and talk through the process (for example, go slowly around the curves, taking my time).

TEACHER SAY: Once your hands are traced, you can color and decorate your picture any way you like.

STUDENTS DO: Take turns tracing each other's hands. Color or paint their hands.

TEACHER DO: Walk around to monitor students' work. Write their names on the backs of their papers. If students do not finish during this lesson, continue working on it in upcoming lessons (though there will be no mention of it in the Teacher's Guide).

Share (5 mins)

Directions

1. TEACHER SAY: Think about what we have done in math today. Please talk to your Shoulder Partner and tell them what was your favorite part of class and why.

STUDENTS DO: Shoulder partners share their favorite parts of class and tell why they liked it.

TEACHER SAY: Now I will use the Calling Sticks and ask 3 people to share what they talked about with their Shoulder Partner.

TEACHER DO: Pull three **Calling sticks**. Allow students time to share.

Lesson 29 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count from 1 to 10
- Sky write numbers 1-10
- Create a dot card for 10
- Sort objects by shape, color, and size

STUDENT VOCABULARY:

- Circle
- Sort
- Square
- Ten
- Triangle

LESSON PREPARATION FOR THE TEACHER

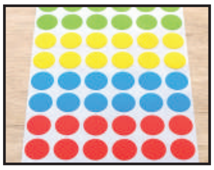
- Prepare 1 square per student so that they can make their own dot card.
- Students will need 10 dot stickers each (or markers to draw them).
- Draw, color, and cut out 1 small red circle, 1 small yellow triangle, 1 small blue square, 1 large blue circle, 1 large red triangle, and 1 large yellow square.
- Label three sheets of paper (or construction paper or the chalkboard): Circles, Triangles, Squares. You will display these during the lesson after students have identified the categories for sorting.
- Label three sheets of paper (or construction paper or the chalkboard): Red, Blue, Yellow. You will display these during the lesson after students have identified the categories for sorting.
- Label 2 sheets of paper (or construction paper or the chalkboard): Small and Big. You will display these during the lesson after students have identified the categories for sorting.
- Have tape available. Students will attach shapes to the labeled papers.

MATERIALS

Calendar Area



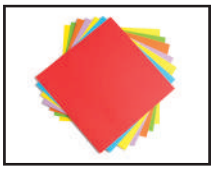
10 dots per student (or markers for students to make their own dots)



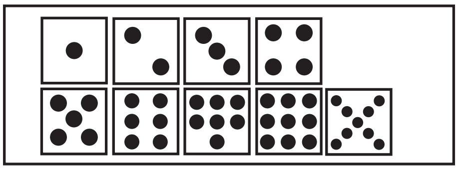
Tape



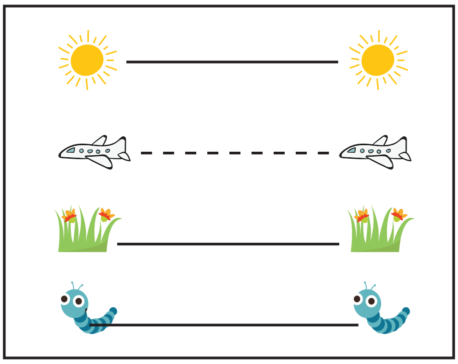
1 square of paper per student



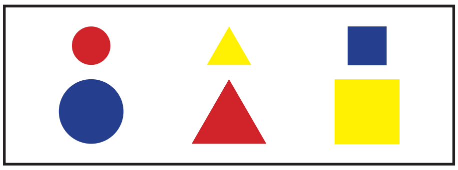
Students' Dot Cards (1-9)



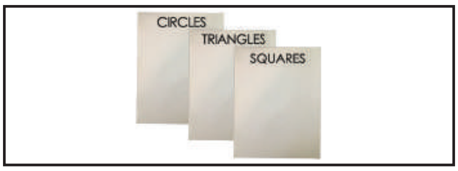
Sky Writing grid



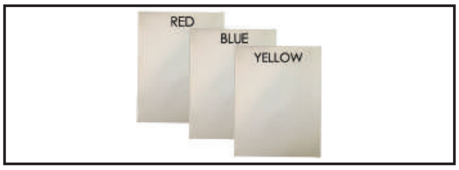
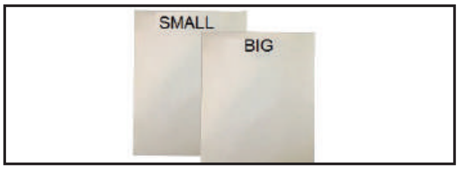
1 small red circle, 1 small yellow triangle, and 1 small blue square. 1 large blue circle, 1 large red triangle, and 1 large yellow square



3 sheets of paper, labeled Circles, Triangles, Squares



MATERIALS

3 sheets of paper, labeled Red, Blue, Yellow	2 sheets of paper, labeled Small and Big (with pictures to help students understand the concepts
	

Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: It is Calendar time!

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: If I point to you, tell me what month it is. If you are not sure, ask a colleague for help.

TEACHER DO: Point to a student.

STUDENTS DO: Selected student says the month or asks for help.

TEACHER SAY: All of the days in a row make up a week. If I point to you, come up and help lead us in saying the days of the week.

TEACHER DO: Point to a student.

STUDENTS DO: Selected student points to the days of the week. All students say the days of the week aloud.

TEACHER SAY: If I point to you, come up and point to today on the calendar. If you are not sure, ask a colleague for help.

TEACHER DO: Point to a student.

STUDENTS DO: Selected student points to today on the calendar or asks for help.

TEACHER SAY: Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now all of you say the date.

STUDENTS DO: Say the date together.

2. TEACHER SAY: Let's move around and celebrate the number 10! Stand up and make sure you have room for Movement Math.

STUDENTS DO: Stand up.

TEACHER SAY:
- **Hop 10 times.**
- **Do 10 jumping jacks.**
- **Reach up high and pick 10 oranges from an imaginary tree.**
- **Pretend you are a bird and flap your wings 10 times.**
- **Crouch down like a lion. Now roar 10 times.**
- **Make yourself small like a baby chick. Peep 10 times.**

STUDENTS DO: Follow along with the teacher in counting and moving.

TEACHER SAY: **Great counting and moving! Stay standing for Sky Writing practice.**

Learn (25-30 mins)

Directions

1. **TEACHER SAY:** **Let's play Mystery Sky Writer again. I'm going to Sky write a mystery number. See if you can guess the numbers I am Sky writing.**

TEACHER DO: Sky write a familiar number between 1-10, saying the steps slowly out loud but not naming the number.

STUDENTS DO: Observe.

TEACHER SAY: **What number did I write? Raise your hand if you think you know.**

STUDENTS DO: Raise hands to answer.

TEACHER DO: Repeat this guessing game with two more numbers.

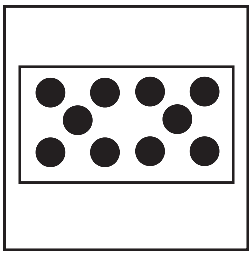
TEACHER SAY: **Awesome! Now it's your turn to write. Sky writing arms ready? Let's write numbers 1-10!**

STUDENTS DO: Stand and hold out a straight arm with two fingers pointing.

TEACHER DO: Lead students in **Sky Writing** the numbers one through ten 1-2 times before moving on.

2. **TEACHER SAY:** **Let's add our last dot card to our sets – 10.**

TEACHER DO: Hand out squares and dots or markers.



TEACHER SAY: **Watch me as I show you how to make a pattern for 10 on your dot card.**

TEACHER DO: Draw a large square on the board. Draw a 10 dot pattern in the square. Options are shown. You can select a pattern for all students to draw or show them all three and let each student pick the one that works for them.

STUDENTS DO: Observe, then make their own 10 dot cards.

TEACHER DO: As students work, hand out their 1-9 dot cards (if you have been storing them). Monitor students' progress and offer help as needed. For students who need extra support, consider having them work with a partner who can help them.

TEACHER SAY: **Congratulations! You have completed a whole set of dot cards. We will continue to use them this year and practice recognizing numbers. Please put your new 10 dot card with your other dot cards and ______ (put them away/I will collect them).**

STUDENTS DO: Put cards away or prepare them for collection.

3. **TEACHER DO:** Transition to sorting. Have all shapes, signs, and tape available.

TEACHER SAY: **The last time we sorted objects, we sorted them by shape and size. Before that, we sorted objects by shape and color. You are so good at sorting that today I have a real challenge for you! I have some new objects for you to sort. I'm going to show them to you and I want you to think about how you want to sort them. Don't say anything yet! Just think.**

TEACHER DO: Take out the shapes and display them so students can see them. Give students 30-60 seconds to think.

STUDENTS DO: Think about how the objects could be sorted.

TEACHER SAY: **Raise your hand if you think you know how the shapes could be sorted.**

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students with raised hands to share their thinking. Call on several students. Ask questions to help guide their thinking until they have identified shape, color, and size as categories for sorting.

TEACHER SAY: **Can we sort these shapes in more than one way?**

STUDENTS DO: Respond together: Yes.

TEACHER SAY: **Yes, we can sort them by shape, size, or color. Let's try shape first. When I call your name, come up and sort shapes. You will tape the shape to the paper.**

TEACHER DO: Display the three shape papers. Use **Calling Sticks** to call on students.

STUDENTS DO: When called on, take a shape and tape it to the correct shape paper.

TEACHER DO: When all shapes have been sorted, have students count to identify how many items are in each category.

TEACHER SAY: **How many circles do we have?**

STUDENTS DO: Respond together: 2.

TEACHER DO: Repeat for triangles and squares. Then, take the shapes down and display the size papers. Repeat the sorting steps to have students sort the shapes by size.

STUDENTS DO: When called on, take a shape and tape it to the correct size paper.

TEACHER DO: When all shapes have been sorted, have students count to identify how many items are in each category.

TEACHER SAY: **How many small shapes do we have?**

STUDENTS DO: Respond together: 3.

TEACHER DO: Repeat for big shapes.

TEACHER DO: When all shapes have been sorted by size, take the shapes back down and display the color papers. Repeat the sorting steps to have students sort the shapes by color.

STUDENTS DO: When called on, take a shape and tape it to the correct color paper.

TEACHER DO: When all shapes have been sorted, have students count to identify how many items are in each category.

TEACHER SAY: **How many red shapes do we have?**

STUDENTS DO: Respond together: 2.

TEACHER DO: Repeat for blue and yellow shapes.

TEACHER SAY: **You really are all amazing sorters! You sorted these same objects by color, size, and shape! Nice work!**

Lesson 30 Overview

OUTCOMES

Students will:
- Participate in Calendar Math
- Count from 1 to 10
- Count objects to tell how many there are to 10
- Demonstrate understanding of the relationship between number and quantity

STUDENT VOCABULARY:

- No new vocabulary. Review vocabulary as needed.

LESSON PREPARATION FOR THE TEACHER

- As noted in Chapter Preparation for the Teacher, in this lesson students will celebrate counting to 10 by playing games and doing activities in which they practice counting and matching numbers and quantities. Familiarize yourself with the games and activities to decide which ones you would like to do and gather the materials you will need for each. The materials you need are included in the game descriptions.
- Consider making 2-3 copies of each game. You will be able to use them again throughout the school year.
- Think about how you will store activities and activity pieces. Plastic baggies, shoe boxes, or other containers will help you organize and manage the materials.
- To maximize activity time, have all activities set up in centers around the room.

MATERIALS

Calendar Math Area



Calendar and Movement (10 mins)

Directions

1. **TEACHER SAY: It is Calendar time! We are going to do a shorter Calendar Math lesson and we are skipping Movement Math because today is a very special day! We are going to celebrate getting to 10 and I have some fun counting activities for you to do! Let's get started.**

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Everyone tell me what month it is.

STUDENTS DO: Respond together: current month.

TEACHER SAY: Say the days of the week with me.

STUDENTS DO: Say the days of the week aloud with the teacher.

TEACHER SAY: If I point to you, come up and point to today on the calendar. If you are not sure, ask a colleague for help.

TEACHER DO: Point to a student.

STUDENTS DO: Selected student points to today on the calendar or asks for help.

TEACHER SAY: **Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now all of you say the date.**

STUDENTS DO: Say the date together.

Learn (45 mins)

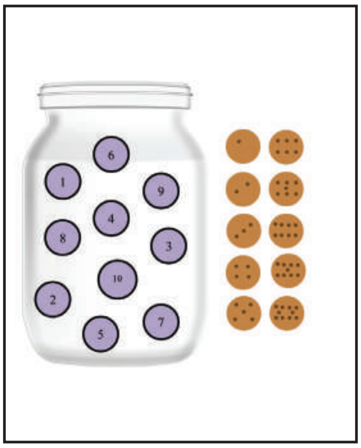
Directions

Counting Colleagues
The teacher will point to self and say, "One." The teacher will then point to a student. That student must stand and say, "Two." That student points at a colleague. That student stands and says, "Three." Students continue to stand and count until they reach 10. Then, they start counting again from 1 to 10. The game repeats until all students are standing

Catch and Count
This game is played the same as **Counting Colleagues**, but instead of pointing, the students gently toss a ball to their colleagues. The colleague who catches the ball stands and counts and then gently tosses the ball to the next colleague.

Materials Needed: Ball

Cookie Jar Matching
Activity Directions:
Students place each cookie on top of the number that matches the number of chocolate chips on the cookie.



How to Make the Activity:

1. Draw a large jar shape onto a sheet of paper.
2. Draw 1 circles inside the jar.
3. Number the circles from 1-10 (randomly).
4. Draw 10 cookies about the same size as the circles on the jar.
5. Draw a dot pattern onto each cookie (1-10).

Materials Needed to Make the Activity:

- Sheet of paper for the jar and number circles
- Construction paper or colored paper to create cookies
- Crayons or markers
- Scissors

Sand Writing
Activity Directions:
Students write numbers 1-10 in sand using their fingers. They can "erase" and practice as many times as they like!

How to Make the Activity:

1. Pour a small amount of sand (or salt) into shallow trays or dishes (preferably plastic). (If the trays have lids, you can save them for later use. Otherwise, pour the sand or salt back into the container at the end of the day.)
2. Put a couple pieces of tape under the trays and place them on a table in an area that students can access.



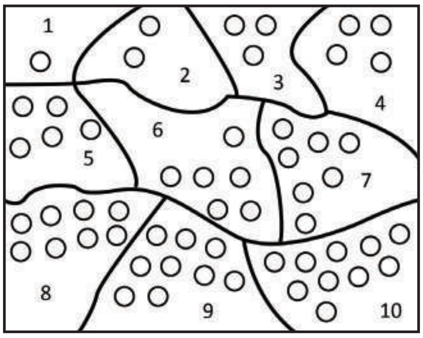
Materials Needed to Make the Activity:

- Sand or salt
- Shallow trays or dishes
- Optional: lids, tape

Number Puzzle

Activity Directions:

Students put the puzzle together to show the numbers in order.



How to Make the Activity :

1. Cut apart a cereal box or heavy piece of construction paper.
2. Draw lines to create puzzle pieces.
3. Draw dots showing 1 to 10.
4. On each piece, write the numeral that matches the number of dots.

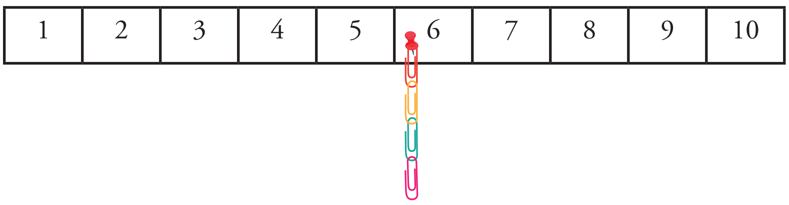
Materials Needed to Make the Activity :

- Empty cereal box or heavy piece of construction paper.
- Marker
- Scissors

Paper Clip Chains

Activity Directions:

Students create chains of paper clips to match the numbers in each section of a paper strip and attach the chains to the strip.



How to Make the Activity:

1. Divide a long strip of heavy paper or cardboard into 10 equal sections.
2. Write a number 1 through 10 in order in each section.
3. Option: Add pictures to each section.
4. Gather 55 paper clips (for each activity you create).
5. Punch or poke a hole at the bottom of each section. Be sure to stay far enough from the edge that the students do not tear the hole when attaching the paper clips.

Materials Needed to Make the Activity:

- Heavy paper or cardboard from an empty cereal box
- 55 paper clips
- Markers
- Hole punch (or scissors) to make holes

Superstar Number Wheel

Activity Directions:

Students attach clothespins to the circle so the number on the clothespins matches the number of stars in each segment.



How to Make the Activity:

1. Divide a large paper plate into 10 sections (they do not have to be equal). Or, cut a large circle out of heavy paper and divide it into 10 sections.
2. Draw stars in each section. Draw 1 star in one section, 2 stars in another, 3 stars in the next, and so on until you draw 10 stars in the last section. They should not be in order.
3. Cut out a circle to cover the center where all of the lines meet.
4. Write numbers 1-10 on 10 clothespins.
5. Optional: Write game title on center circle.

Materials Needed to Make the Activity:

- Large paper plate or sheet of heavy paper
- Ruler or straight edge
- Markers
- 10 wooden or plastic clothespins that open and close

Feed the Birds

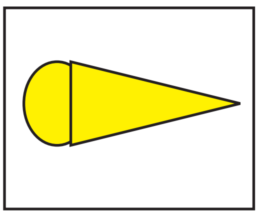
Activity Directions:

Students feed cardboard "birds" the right number of "worms."



How to Make the Activity:

1. Cut 2 sections off of a clean cardboard egg carton so 10 sections remain.
2. Paint the bottom of the egg carton to look like birds, such as a brown body, red breast, and black eyes.
3. Write a number on top of each bird to tell the student how many "worms" to feed it.
4. Poke a hole in each bird to create a mouth. For larger numbers, you may need to make the mouth a bit larger.
5. Cut out small cones (as shown below) out of yellow or orange construction paper to create "beaks."



6. Fold on the line and glue the beak above each bird mouth. Pinch them in half to create a rounded beak.
7. Cut chenille stems (pipe cleaners) into small worms (6-7 cm). Students will need 55 worms.

Materials Needed to Make the Activity:

- Clean cardboard egg carton
- Scissors
- Paint
- Markers
- Scissors
- Construction paper or white paper colored yellow or orange
- Glue
- Chenille stems (pipe cleaners)



Ice Cube Tray Sorting

Activity Directions:

Students sort small dot cards into an ice cube tray by matching the number of dots on the cards to the numbers written in the tray sections.

How to Make the Activity

1. Using a permanent marker, write the numbers 1 through 10 in the sections of a clean ice cube tray (2 sections will be empty).
2. Create 1 or 2 sets of small dot cards for numbers 1-10.

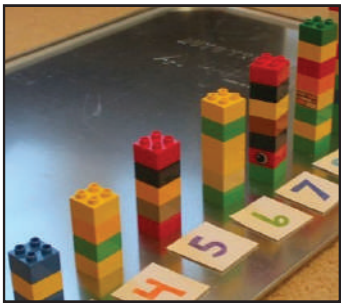
Materials Needed to Make the Activity:

- Clean plastic ice cube tray
- Small squares of paper or light cardboard (from an empty cereal box)
- Markers

Building Towers

Activity Directions:

Students build towers of blocks to match numbers on cards.



How to Make the Activity

1. Create 10 small cards (about 8 cm x 8 cm) and write the numbers 1-10 on them.
2. Provide a bag or box of 55 cubes or blocks.

Materials Needed to Make the Activity:

- 55 building blocks: connecting cubes, wooden blocks, or interlocking building blocks (such as Duplo Legos)
- Paper
- Scissors
- Markers

Roll and Cross

Activity Directions:

Students roll a large number cube and cross off the number rolled from a list of numbers 1-10. Five sides of the cube show dots up to 5. The sixth side of the cube shows numbers 6-10. Students may cross off any one of those numbers until all numbers are crossed off.

1
2
3
4
5
6
7
8
9
10



How to Make the Activity:

1. Cover a square tissue box with paper.
2. Draw dots on 5 sides of the cube: 1 dot, 2 dots, 3 dots, 4 dots, 5 dots.
3. On the sixth side write 6, 7, 8, 9, 10.
4. Create a strip of paper listing numbers 1-10 in a column (Create several so multiple students can play.)

Materials Needed to Make the Activity:

- Empty cube tissue box
- Butcher paper, wrapping paper, or large sheet of paper to cover box
- Markers
- Scissors
- Strips of paper

Share (5 mins)

Directions

1. TEACHER DO: If possible, ask classroom volunteers or student helpers to clean up the games and put them away during Share.

TEACHER SAY: **That was fun! Which activities were your favorites? Why?**

STUDENTS DO: Share their thoughts about their favorite games.

KINDERGARTEN I

Mathematics

CHAPTER 4

Lessons 31-40

Overview

Lessons 31-40

COMPONENT	DESCRIPTION	TIME
Calendar and Movement	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills. Students explore quantity and practice counting through patterns and movement.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from colleagues' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY:

- Count by ones up to 10.
- Read and write numerals from 0 to 10.
- Write numbers and represent quantities with a number.
- Represent a number (0-5) by producing a set of objects or pictures.
- Identify the number of objects in familiar groupings without counting.

MEASUREMENT:

- Classify objects into given categories (for example length, weight, size, color) and sort categories by count.

Day 31-40 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
31	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Sky write numbers 0-10 • Write number 0
32	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Sky write numbers 0-10 • Write number 1 • Represent quantities of 1 using drawings or objects
33	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 2 • Represent quantities of 2 using drawings or objects. • Classify objects to identify and extend simple patterns
34	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 3 • Represent quantities of 3 using drawings or objects. • Demonstrate understanding of the relationship between number and quantity
35	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 4 • Represent quantities of 4 using drawings or objects.
36	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Sky write numbers 0-10 • Write number 5 • Represent quantities of 5 using drawings or objects
37	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 6 • Represent quantities of 6 using drawings or objects.

LESSON	INSTRUCTIONAL FOCUS
38	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 7 • Represent quantities of 7 using drawings or objects • Discuss the role of mistakes in mathematics
39	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Sky write numbers 0-10 • Write number 8 • Represent quantities of 8 using drawings or objects. • Discuss the role of mistakes in mathematics
40	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 9 • Represent quantities of 9 using drawings or objects.

Theme Preparation for the Teacher

- Create a set (or several sets) of tactile number writing practice cards for numbers 0-10. Add the practice cards to your collection of math games and activities.
  - Option 1: Cut numbers out of sheets of sandpaper and glue them to construction paper.
  - Option 2: Cut out 11 rectangles from cardboard (empty cereal boxes) or heavy paper. Write a large number from 0 to 10. Pour glue along the line, then pour sand onto the glue. Wait until the glue is dry, then pour the sand off of the card. Students can trace the numbers with their fingers. This tactile practice will be helpful to students who need to touch and move in order to learn.

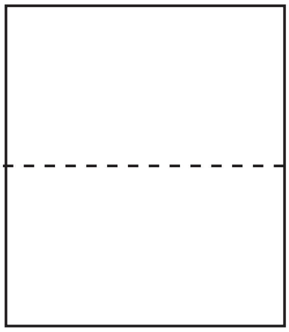


- Continue to play the activities you created for Day 30. Students might access the activities during recess/free time, after completing an assignment, or at the end of a math lesson if time allows.
- Continue to expand your collection of games and activities. Create games and activities focused on counting, identifying and repeating patterns, sorting, connecting number and quantity, and writing numerals.
- Sing counting songs with students to help them learn, practice, and apply counting skills.

Lesson 31 Overview

OUTCOMES	STUDENT VOCABULARY
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Sky write numbers 0-10 • Write number 0	• Counting • Create • Zero

LESSON PREPARATION FOR THE TEACHER

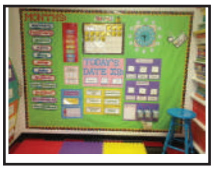
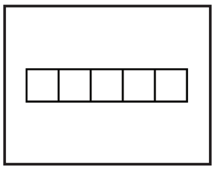
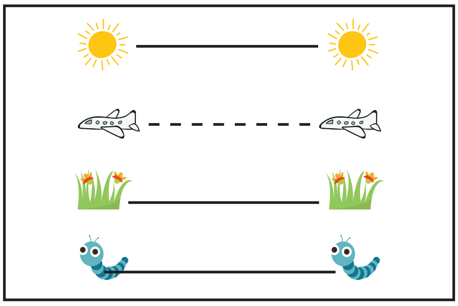


- Create or print out a blank five frame.
- Prepare counting books for students. Write students' names on the books. Consider the following options:
  - Use 6 sheets of paper and fold in half in the landscape position. Use 1-2 staples to bind papers together along the fold.
  - Use 12 notecards and create a hole in one of the top corners. Link the cards by tying them together with yarn or string or by threading a small metal ring through the hole.
  - Use 13 sticky notes and bind them with one staple at the top. Turn the last sticky note around and place sticky side to sticky side so create a non-sticky back cover.
- Preview the directions for the counting and clapping pattern in the Calendar and Movement Math segment.

MOVEMENT MATH: COUNTING AND CLAPPING PATTERN

Image 1: Students place hands to their side with palms up.	Image 2: Students form a circle and place their right palm on top of the left palm of the classmate to their right. They will place their left palm below their classmate on their left.
 Images Courtesy of Seidah Armstrong	

MATERIALS

Calendar Math Area		Five Frame	
Counting Books		Pencils	
Crayons			
Sky Writing grid			

Calendar and Movement (15-20 mins)

Directions

1. **TEACHER SAY: It's Calendar time! Remember, the calendar helps us keep track of days, weeks, and months in a year. Today we are going to practice our calendar routine like mice. First, I'll point to the top of the calendar**

TEACHER DO: Point to the month at the top of the calendar

TEACHER SAY: Who can share what month we are in? Whisper the month to your Shoulder Partner.

STUDENTS DO: Whisper the month to **Shoulder Partner**.

TEACHER SAY: Great, the month is ______. Now let's turn into mice and practice saying the month together. Watch as I take my hands and hold them behind my head to make mouse ears.

TEACHER DO: Hold pointer fingers and middle fingers up on both hands and put them behind head to make mouse ears.

TEACHER SAY: Alright, hold up your fingers like ears and turn into mice and say the month.

STUDENTS DO: Hold up their fingers behind their heads like ears and say the month aloud.

TEACHER SAY: Great job, little mice. Let's keep our mouse ears up and practice saying the days of the week together.

STUDENTS DO: Say the days of the week in order with the teacher while pretending to be mice.

TEACHER SAY: Remember each square in one row represents a different day of the week. I am going to use my Calling Sticks to call on someone to come up and point to today and tell us what day it is while still acting like a mouse.

TEACHER DO: Use **Calling Sticks** to choose a student to point to the day and state the day's name to the class. Help the student, as needed.

STUDENTS DO: Selected student comes up to the calendar and points to and says the day.

TEACHER SAY: That's right, today is _______. Thank you ________ (name of student). Good job! Now I will say all of the days of the week, but I will stop before I'm done. Can you tell me which day comes next? Sunday, Monday, Tuesday, Wednesday, Thursday, __________, Saturday.

STUDENTS DO: Say together: Friday.

TEACHER SAY: That's correct! Great job!

TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: This square on the calendar represents today. Today is (day) the (number date) of (month) (year). Can you put up your mouse ears and say the date, too?

STUDENTS DO: Repeat the date.

2. TEACHER SAY: Great job today on the calendar. Let's get up and move to movement math! Are you ready? Stand with a quiet body if you are ready.

STUDENTS DO: Stand with still arms and legs.

TEACHER SAY: We are going to count to 10, but today we are going to try a brand new clapping pattern. I will demonstrate the pattern first with some of your classmates. Watch closely, then we will all repeat the clapping pattern.

TEACHER DO: Use **Calling Sticks** to call 5 students to the front of the room. Show students how to form a circle and model how they should stand (see Lesson Preparation for the Teacher). Then explain the counting and clapping pattern.

TEACHER SAY: I will begin by counting 1 and clapping the hand of ________ (say the name of the student to your right). Then, ______ will count 2 and clap _______'s hand (the person to their right). ______ will count 3 and clap the hand of ______ (the person to their right). We will continue around the circle, counting and clapping, until we get to 10. Watch us practice!

TEACHER DO: Demonstrate the counting and clapping pattern two times.

3. TEACHER SAY: Now it's your turn. I am going to place you in groups of five. If I point to you first, you will start the pattern by counting and clapping 1 when we begin. Begin when you hear me say "go," but not before you hear "go."

TEACHER DO: Direct students to stand in their groups and form a circle. Point to make sure the first person knows they will start the counting and clapping pattern in their group once the class gets started. Check on each group to ensure that every group has formed a circle and their hands are in the correct position with their palms faced up.

STUDENTS DO: Stand and form a circle with their group mates. Hold hands out at sides, palms up as directed by the teacher.

TEACHER SAY: Let's begin! Use the pattern to count from 1 to 10.

STUDENTS DO: Practice the clapping and counting pattern one time through.

TEACHER SAY: Let's try the pattern one more time.

STUDENTS DO: Practice the clapping and counting pattern one more time.

TEACHER SAY: Great job following directions and leaning a complicated pattern! We will repeat this new pattern tomorrow. For now, please quietly return to your seats, but do not sit down. Stand behind your chairs. I am going to count down from 10, and by the time I say 1 you should be standing behind your seats. Stand in Sky Writing position – we are going to practice writing all our numbers, 1-10!

TEACHER DO: Count slowly backwards from 10 while students return to their seats and stand behind their chairs.

Learn (25-30 mins)

Directions

1. **TEACHER SAY: We have learned so many numbers! But, we have a new number to learn today. I want to see if anyone can guess what it is. Take a look and give me a thumbs up if you think you know.**

TEACHER DO: Display a blank five frame. Give students a moment to think about the new number. Then, call on students with their thumbs up. Students may know zero or they may say "nothing."

TEACHER SAY: There are zero dots on this five frame. The number we are talking about today is zero. What do you think zero means?

STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on students to answer the question. Acknowledge correct answers.

2. **TEACHER SAY: Every time we learn a new number, I give you a five frame or two and some counters. Should I hand out some counters for you to practice with?**

STUDENTS DO: When called on, share their thoughts about whether or not they need counters to practice counting to zero.

TEACHER SAY: Let's see if you understand zero. How many elephants are in the classroom?

STUDENTS DO: Respond together: zero.

TEACHER SAY: How many pyramids did you jump over this morning?

STUDENTS DO: Respond together: zero.

TEACHER SAY: How many of you have a neck as long as a giraffe?

STUDENTS DO: Respond together: zero.

TEACHER SAY: How many dinosaurs did you see on your way to school today?

STUDENTS DO: Respond together: zero.

3. **TEACHER SAY: Great job! Let's Sky Write zero together. Does anyone know what a zero looks like? Give me a thumbs up if you do.**

STUDENTS DO: Give a thumbs up if they know what a zero looks like.

TEACHER DO: Call on students with thumbs up.

TEACHER SAY: A zero looks a lot like a shape that you know – a circle!

TEACHER DO: Write a 0 on the board. Display the Sky Writing Grid.

TEACHER SAY: Stand up and get your Sky Writing arms ready.

STUDENTS DO: Stand and hold out a straight arm with two fingers pointing.

TEACHER SAY: **Let's write. Say the steps aloud with me as you write. We will practice a few times.**

TEACHER DO: Sky write the number 0, saying steps slowly aloud.

STUDENTS DO: Sky write 0 repeating the steps aloud.

TEACHER DO: Practice 2-3 times.

4. TEACHER SAY: **Today we are going to create a counting book. Do you know what the word create means?**

STUDENTS DO: Raise hands to answer the question. Share ideas when called on.

TEACHER DO: Call on students with a hand raised and allow 2-3 students to answer before providing the definition.

TEACHER SAY: **When we create something, we make it ourselves. Today, we are going to create our own counting books. Every day, we will add a new number to our counting book. We will also go over the numbers in our book every day.**
Are you ready to write the first page in your counting book?

STUDENTS DO: Confirm they are ready or ask questions.

TEACHER SAY: **Great! I am going to hand out your books. Please do not open them until I say the word "open."**

TEACHER DO: Hand out counting books to students.

TEACHER SAY: **Now that everyone has a counting book, tell both of your Shoulder Partners what you are going to do with your counting book.**

STUDENTS DO: Talk to both **Shoulder Partner**s how they will be using the counting book.

TEACHER DO: Walk around and listen to the conversations about the counting book. Make sure students are sharing the correct information about the purpose of the counting book. Use the **Attention Getting Signal** so that students end their conversations and get ready for the next direction.

5. TEACHER SAY: **The first number we are going to write in our counting books is our new number – zero!**

TEACHER DO: Point to the number 0 on the board.

TEACHER SAY: **Open up your counting book to the first page.**

STUDENTS DO: Open counting books to the first page.

TEACHER DO: Hold up a counting book and point to the page where you want students to write the number 0.

TEACHER SAY: **Write the number 0 on this page.**

STUDENTS DO: Write the number 0 in their counting books.

TEACHER DO: Walk around and check progress. Help students, if needed. Take note of students who may need additional instruction.

6. TEACHER SAY: **Most days we will draw shapes or objects on our page so we can remember what a number means. If I asked you to draw 0 oranges on the page, what would you do? Raise your hand if you have an idea.**

STUDENTS DO: Raise hands to answer.

TEACHER DO: Call on a student with a hand raised. Repeat the question, if necessary.

STUDENTS DO: Selected student answers the question.

TEACHER SAY: **Correct! You would do nothing. If you draw 0 oranges, you draw nothing on your page. So for today we will draw nothing in our counting books.**

TEACHER DO: Collect books for later use.

Share (5 mins)

Directions

1. **TEACHER DO:** Have students **Turn and Talk** to their **Shoulder Partner** about what they learned today in math.

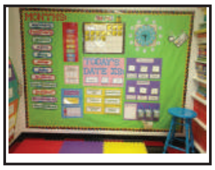
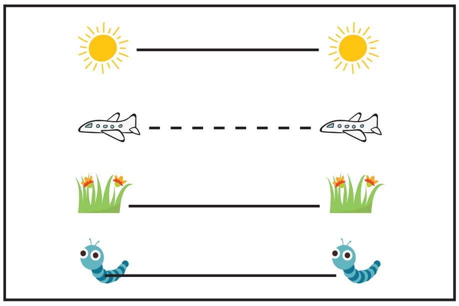
TEACHER SAY: **Let's think one more time about the number 0. Would you rather have zero desserts or zero bug bites? Turn to your Shoulder Partner and tell them your answer.**

STUDENTS DO: Discuss their preference with a **Shoulder Partner**.

Lesson 32 Overview

OUTCOMES	STUDENT VOCABULARY
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Sky write numbers 0-10 • Write number 1 • Represent quantities of 1 using drawings or objects	• Counting • Create • Drawing • One

MATERIALS

Calendar Math Area		Crayons	
Counting Books		Pencils	
Sky Writing grid			

Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: It is Calendar time!

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: If I point to you, tell me what month it is. If you are not sure, ask a colleague for help.

TEACHER DO: Point to a student.

STUDENTS DO: Selected student says the month or asks for help.

TEACHER SAY: All of the days in a row make up a week. If I point to you, come up and help lead us in saying the days of the week.

TEACHER DO: Point to a student.

STUDENTS DO: Selected student points to the days of the week. All students say the days of the week aloud.

TEACHER SAY: If I point to you, come up and point to today on the calendar. If you are not sure, ask a colleague for help.

TEACHER DO: Point to a student.

STUDENTS DO: Selected student points to today on the calendar or asks for help.

TEACHER SAY: Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now all of you say the date.

STUDENTS DO: Say the date together.

TEACHER SAY: Great job today on the calendar. Let's get up and move to movement math! Are you ready? Stand with a quiet body if you are ready.

STUDENTS DO: Stand still.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: Are you ready to do movement math?

STUDENTS DO: Confirm they are ready.

TEACHER SAY: Yesterday we learned a new clapping pattern to count to 10. Does anyone remember the new clapping pattern?

TEACHER DO: If needed, briefly review with students the directions of the counting and clapping pattern from Day 31.

TEACHER SAY: Form a circle with your movement group from yesterday.

TEACHER DO: Point to students and direct them to stand with their groups and form a circle. Make sure the first person knows they will start the counting and clapping pattern in their group once the class gets started.

TEACHER SAY: Make sure your arms are in the right position.

TEACHER DO: Repeat the new clapping pattern three times.

STUDENTS DO: Repeat the new clapping pattern three times.

TEACHER SAY: Great work! Go back to your seat and we'll do some Sky Writing practice.

STUDENTS DO: Return to their seats and prepare for **Sky Writing**.

Learn (25-30 mins)

Directions

1. TEACHER SAY: We have practiced writing a lot. I want to show you a new activity in our math activity collection.

TEACHER DO: Hold up a couple of the tactile number cards.

TEACHER SAY: These cards are to help you practice writing numbers. You just trace the numbers with your finger. They feel rough! You can find the cards here: ________________.

TEACHER DO: Place the cards where they will be stored.

TEACHER SAY: Now, let's practice our number writing. Today, you are going to turn your finger into a feather. This feather will help you gently write the numbers on the back of your Shoulder Partner.

TEACHER DO: Hold up index finger.

TEACHER SAY: My special feather writes in purple. Your feather can write in any color you want. Turn and tell your Shoulder Partner what color your feather writes in.

STUDENTS DO: Turn and talk to their partners.

TEACHER SAY: Today we are going to Sky Write the numbers on the back of our Shoulder Partners with our feathers. The student with the shorter hair will go first. You will use your partner's back like a blackboard to gently write the number zero. It should feel like a feather on your partner's back. Now, everyone Sky Write the number 0 and say 0.

STUDENTS DO: Sky Write the number 0 and say 0.

TEACHER DO: Repeat the steps above for numbers 1-10.

TEACHER SAY: Now let's switch. The other partner can practice writing the numbers 0-10.

STUDENTS DO: Practice **Sky Writing** the numbers 0-10 on the backs of their partners.

TEACHER SAY: Superb job Sky Writing!

2. TEACHER DO: Write the number 1 on the board. Display the **Sky Writing** Grid.

TEACHER SAY: Look at the number I just wrote. It's a 1. Do you know how much one is? Show me how much 1 is using your fingers.

STUDENTS DO: Raise 1 finger to show 1.

TEACHER SAY: If I say I have 1 apple, it is the only apple I have. Today we are going to use magical glasses to find other objects in the room that show us the number 1. I can make magical glasses by forming my hands into two circles and holding them up to my face. We use our magical glasses when we need to look at things carefully.

TEACHER DO: Create binoculars with hands.

TEACHER SAY: Can you now hold your magical glasses up to your eyes?

STUDENTS DO: Create binoculars with hands.

TEACHER SAY: Watch as I look around the room for 1 of an object. Through my magical glasses I see 1 clock.

TEACHER DO: Use magical glasses to look in the direction of the classroom clock. If there is not a clock in the room, find another object that represents 1.

TEACHER SAY: Can you find the 1 clock with your magical glasses?

STUDENTS DO: Look through their hands at the clock (or other object you identified).

TEACHER SAY: Great job, now can you look around our classroom with your glasses and find 1 of something?

STUDENTS DO: Look around the classroom.

TEACHER SAY: When you have found 1 of something raise your hand.

TEACHER DO: Call on a raised hand.

TEACHER SAY: ______ (name of student), what did you find 1 of?

STUDENTS DO: Respond to the question.

TEACHER SAY: Now let's all look at the 1 ______ that (name of student) found.

STUDENTS DO: Look at the object.

TEACHER DO: Repeat the process with 2-3 more students.

TEACHER SAY: Great work with your magical glasses. Let's now put them away.

TEACHER DO: Pretend to pull off special glasses and shake out hands.

3. TEACHER SAY: Today we are continuing to create our counting books. What does it mean to create?

STUDENTS DO: It means we make it.

TEACHER SAY: That's correct! When you create something, you are making it yourself. I will hand out your counting book. Once you receive your book, we will write a number in our counting book. Please do not touch your counting book until I ask you to.

TEACHER DO: Hand out counting books to students.

TEACHER SAY: Make sure your name is on your counting book.

TEACHER DO: Walk around and make sure students have their counting books. Then, write the number 1 on the chalkboard.

TEACHER SAY: Today we are going to write the number 1. Let's Sky Write it one more time together.

STUDENTS DO: Follow the directions and practice writing the number 1.

TEACHER SAY: Great job! Please find the page where you wrote your zero.

STUDENTS DO: Open their counting books to the page with zero.

TEACHER SAY: Now, turn to the next page.

STUDENTS DO: Turn to the next page.

TEACHER SAY: You should be on the next blank page after your zero. Write the number 1 in your counting book on this page.

STUDENTS DO: Write the number 1 in their counting books.

TEACHER DO: Walk around and check progress. Help students, if needed.

TEACHER SAY: What does it mean to have one of something? Turn and Talk to your neighbor and tell them 1 toy that you have.

STUDENTS DO: Turn and Talk and discuss 1 toy that they have.

TEACHER SAY: Draw in your counting book a picture of 1 toy you have. Make sure you are drawing on the same page as the number 1 you just wrote! And, make sure you only draw 1 toy.

TEACHER DO: Hold up the counting book and point to the page where students should draw their 1 toy. Model this by drawing your 1 toy.

STUDENTS DO: Draw 1 toy to represent the number 1.

TEACHER DO: Walk around and assist students with pictures as needed.

TEACHER SAY: **Tomorrow we will write a new number in our counting books.**

TEACHER DO: Collect the counting books.

Share (5 mins)

Directions

1. **TEACHER SAY:** **When is a time you might have to write numbers in your life outside of school? Now or when you are older? Think about it for a moment, then I will use Calling Sticks to call on some of you.**

STUDENTS DO: Think about when they might need to write numbers.

TEACHER DO: Use **Calling Sticks** to select students to answer the question.

Lesson 33 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count from 1 to 10
- Write number 2
- Represent quantities of 2 using drawings or objects.
- Classify objects to identify and extend simple patterns

STUDENT VOCABULARY

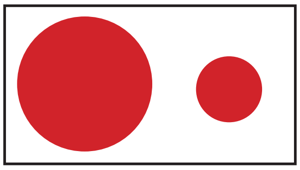
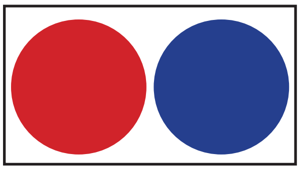
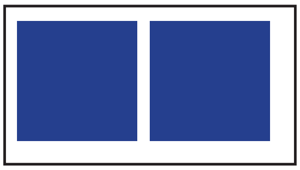
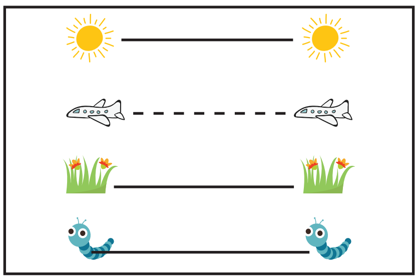
- Big
- Blue
- Circle
- Counting
- Create
- Red
- Small
- Square
- Two

LESSON PREPARATION FOR THE TEACHER

- Create the following shapes for pattern practice:
  - 3 big red circles (exact same size)
  - 3 small red circles (exact same size)
  - 3 blue circles (same size as the 3 big red circles)
  - 3 red squares (same size as the 3 big red circles)

Note for the Teacher: Students will analyze and extend three types of patterns: big/small, red/blue, and circle/square. The recommendations above minimize the amount of preparation you will have to do because you will be able to use the 3 big red circles in all three patterns. However, if you prefer, you can substitute different colors and shapes. Keep the shapes for future math lessons.

MATERIALS

Calendar Math Area		Counting Books	
Pencils		Crayons	
3 big red circles and 3 small red circles (same color)		3 red circles and 3 blue circles (same size)	
3 red circles and 3 red squares (same size)		Tape	
Sky Writing grid			

Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: Today is a special day. You have been working so hard in calendar that I think you are ready to be the teacher. Do you think you would like to try that? Nod your head like this (teacher nods head), if you would like to try. If you think you could be the teacher, raise your hand.

STUDENTS DO: Raise their hands.

TEACHER DO: Call on a raised hand. Keep track of students who have helped you to ensure that all students get a chance before you repeat students.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ (name of student) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

Note for the Teacher: Prompt student helpers as they move through this routine. Over time they will develop more confidence and independence.

TEACHER SAY: Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's do Movement Math! Today we'll visit a friend. Stand up and make sure you have room.

STUDENTS DO: Stand up.

TEACHER DO: Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY: Make sure you count as you do each movement!

- **Spin around 1 time.**
- **Pretend you are your friend's door and knock 2 times.**
- **They answered the door. Say hello 3 times.**
- **Your friend gives you hot tea. Hold it in your hand and blow on it 4 times.**
- **Now take 5 big sips. Then you can set the cup down.**
- **Your friend gave you a big cookie! Take 6 bites!**
- **Tell your friend "thank you" 7 times.**
- **Wipe your mouth 8 times.**
- **Let's play together! Bounce a ball 9 times.**
- **Time to go home! Wave goodbye 10 times.**

STUDENTS DO: Follow each direction, doing each movement the correct number of times and counting aloud.

TEACHER SAY: Wonderful! Give your neighbor a high five and have a seat.

TEACHER DO: Pat head.

STUDENTS DO: Pat their heads and sit.

Learn (25-30 mins)

Directions

1. **TEACHER DO:** Write the number 2 on the board. Display the **Sky Writing** Grid.

TEACHER SAY: Look at the number I just wrote. It's a two. Do you know how much two is? Show me what 2 looks like using your fingers.

STUDENTS DO: Hold up 2 fingers.

TEACHER SAY: Two means I have 1 more than 1 item. We have 2 ears. What other body parts do we have 2 of? Raise your hand if you have some ideas.

STUDENTS DO: Raise hands to answer the question. Selected students might answer: eyes, eyebrows, lips, arms, hands, thumbs, legs, feet, knees.

TEACHER SAY: Let's practice writing the number 2. I would like ______ (name of student) to come up and help me. First, watch us Sky Write it together.

STUDENTS DO: Stand in the **Sky Writing** position. Selected student helps the teacher model **Sky Writing**.

TEACHER DO: Use the lines on the **Sky Writing** grid to review how to Sky Write a 2.

TEACHER SAY: Now you try it. Let's Sky Write the number 2 three times.

STUDENTS DO: Sky Write the number 2 three times.

2. **TEACHER SAY: Today we are continuing to create our counting books. What number did we write in our counting book yesterday?**

STUDENTS DO: Respond together: 1.

TEACHER SAY: Yes! Yesterday we wrote number 1 in our counting book and created picture of 1 toy that we have.

TEACHER DO: Hand out counting books to students.

TEACHER SAY: Please make sure your name is on your counting book.

STUDENTS DO: Check to make sure they have the write counting book.

TEACHER DO: Walk around and make sure students have their counting book.

TEACHER SAY: Find the page where you wrote the number 1 and drew 1 toy.

STUDENTS DO: Find the 1 page.

TEACHER DO: Hold up a counting book and point to the page you want students to write the number 2.

TEACHER SAY: Now, turn to the next page. That is where we will write 2.

STUDENTS DO: Turn to the next page and prepare to write.

TEACHER SAY: **Okay class, write the number 2 in your counting book on this page. Write it just like we wrote it in the air.**

STUDENTS DO: Write 2 in their counting books.

TEACHER DO: Walk around and check progress. Offer help, if needed.

TEACHER SAY: **Now, draw a picture of 2 eyes on the next page of your counting book.**

TEACHER DO: Hold up the counting book and point to the page where students should draw their 2 eyes. Model this by drawing 2 eyes.

STUDENTS DO: Draw 2 eyes to represent the number 2.

TEACHER DO: Walk around and assist students with pictures as needed.

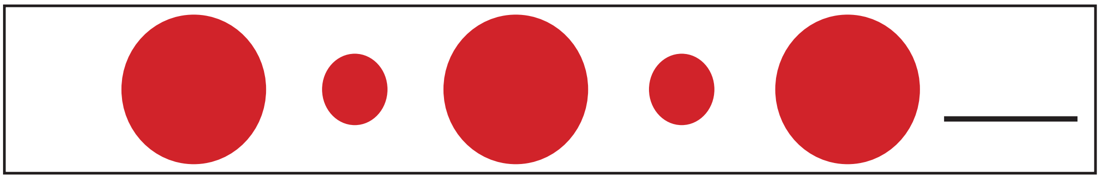
TEACHER SAY: **Great job! Tomorrow we will write a new number in our counting books. What number do you think it will be? Give a thumbs up if you think you know.**

STUDENTS DO: Give a thumbs up if they think they know the next number they will write.

TEACHER DO: Collect the counting books.

TEACHER SAY: **Let's play a game. I'm going to create a pattern. See if you can figure out the pattern and tell me what comes next. you know, you can give me a thumbs up, but do not call out!**

TEACHER DO: Tape the following shapes on the board to form a big/small pattern:



STUDENTS DO: Analyze the pattern to determine what comes next. Give thumbs up if they think they know.

TEACHER SAY: **Now I would like to know who knows what comes next in the pattern and how you know.**

TEACHER DO: Call on students with thumbs up.

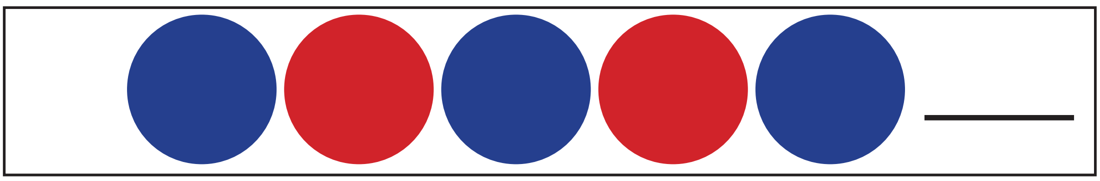
STUDENTS DO: Selected students answer the question and explain how they know.

TEACHER SAY: **______ (name of student) explained how the pattern shows a big circle, then a small circle, then a big circle, then a small circle, then a big circle. All of the shapes are circles. All of the shapes are red. The only thing that changes is the size: big, small, big, small. So, the next shape in the pattern is a small circle.**

TEACHER DO: Tape the small circle to the end of the pattern so students can see how it repeats. Then, take down all shapes.

TEACHER SAY: **Let's try another one. Give a thumbs up if you think you know what should come next in the pattern. Remember, no calling out!**

TEACHER DO: Tape the following shapes on the board to form a red/blue pattern:



STUDENTS DO: Analyze the pattern to determine what comes next. Give thumbs up if they think they know.

TEACHER SAY: Now I would like to know who knows what comes next in the pattern and how you know. This time, when I say go, I want you all to tell me at the same time. Go!

STUDENTS DO: Call out the answer together.

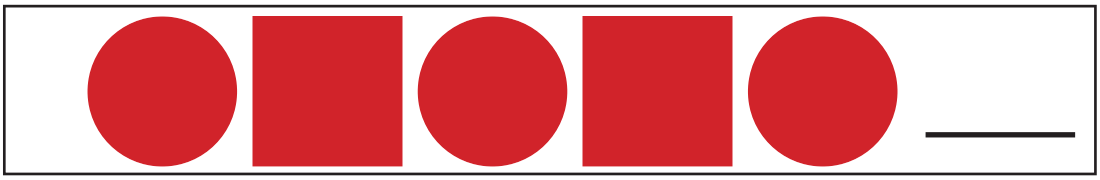
TEACHER DO: Listen to see if most students agree or if there are some voices of disagreement. Call on students to explain how they know what comes next in the pattern.

TEACHER SAY: ______ (name of student) explained how the pattern shows a red circle, then a blue circle, then a red circle, then a blue circle, then a red circle. All of the shapes are circles. All of the shapes are the same size. The only thing that changes is the color: red, blue, red, blue, red. So, the next shape in the pattern is a blue circle.

TEACHER DO: Tape the blue circle to the end of the pattern so students can see how it repeats. Then, take down all shapes. If time allows, explore another pattern with students.

TEACHER SAY: This is a fun game! Let's do one more. Give a thumbs up if you think you know what should come next in the pattern. Remember, no calling out!

TEACHER DO: Tape the following shapes on the board to form a circle/square pattern:



STUDENTS DO: Analyze the pattern to determine what comes next. Give thumbs up if they think they know.

TEACHER SAY: Now I would like to know who knows what comes next in the pattern and how you know. When I say go, I want you all to tell me at the same time. Go!

STUDENTS DO: Call out the answer together.

TEACHER DO: Listen to see if most students agree or if there are some voices of disagreement. Call on students to explain how they know what comes next in the pattern.

TEACHER SAY: ______ (name of student) explained how the pattern shows a circle, then a square, then a circle, then a square, then a circle. All of the shapes are red. All of the shapes are the same size. The only thing that changes is the shape: circle, square, circle, square, circle. So, the next shape in the pattern is a square.

TEACHER DO: Tape the square to the end of the pattern so students can see how it repeats. Then, take down all shapes.

TEACHER SAY: You did an amazing job with patterns today! We'll play again another day.

Share (5 mins)

Directions

1. **TEACHER DO:** Have students **Turn and Talk** to their **Shoulder Partner** about what they learned today in math.

STUDENTS DO: Students discuss what they learned today in math.

2. **TEACHER DO:** Use **Calling Sticks** to select students to share their thinking with the class.

STUDENTS DO: If selected, talk about their learning with their colleagues.

Lesson 34 Overview

OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write number 3 • Represent quantities of 3 using drawings or objects. • Demonstrate understanding of the relationship between number and quantity	• Counting • Create • Three	• No new preparation needed.

MATERIALS

Calendar Math Area



Counting Books



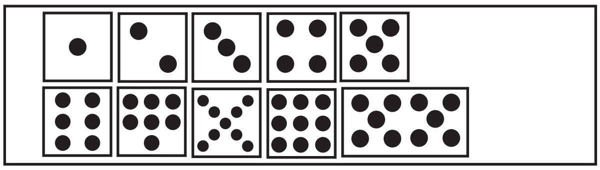
Crayons



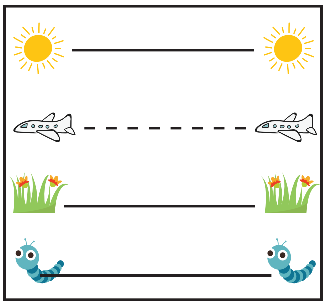
Pencils



Students' Dot Cards (1-10)



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER SAY: Today another student is going to be the Calendar Helper. You will all get a chance, but I will only choose one person each day.

TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ (name of the student) is going to help us with our calendar math.

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- **Say the current month**
- **Say the current day of the week**
- **Say all of the days of the week in order**
- **Point to the date on the calendar**
- **Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."**

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, _______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: **Today we're going to do something different. We can only do it if you are very good listeners. Are you good listeners?**

STUDENTS DO: Respond together.

TEACHER SAY: **First, I want everyone to stand up and make a big circle around the room.**

Note for the Teacher: If it is not possible for students to stand and form a circle, this movement math can be done outside at the end of math class or during a recess period. Another option is to write numbers 1-10 on small pieces of paper (as many pieces as you have students) and give each student a number. Then students will stand in place for the activity. These directions explain the circle approach, but the concept is the same for the small pieces of paper approach.

TEACHER DO: Help students form a large circle. Make sure each student has room to jump.

TEACHER SAY: **I'm going to point at each of you and say a number. Your job is to remember your number. Do not forget your number!**

TEACHER DO: Point at the first student (any student) and say 1. Continue to move around the circle slowly, assigning each student a number between 1 and 10.

TEACHER SAY: **All of the 1's, jump one time.**

STUDENTS DO: Raise hands if assigned 1.

TEACHER SAY: **All of the 2's, jump one time.**

STUDENTS DO: Raise hands if assigned 2.

TEACHER DO: Continue for all numbers 3 through 10.

TEACHER SAY: **Now, we are all going to count from 1 to 10. But when we say your number, you jump up when you count. Are you ready?**

STUDENTS DO: Confirm they are ready.

TEACHER DO: Start the counting and movement activity. Go at a fairly slow pace to help students keep track of the count and their assigned number. It is okay if students do not quite understand the game the first time they play. They will get better with practice. Keep going around the circle for about a minute (or until all students have jumped at least once plus some extra practice).

STUDENTS DO: Count from 1 to 10 repeatedly, jumping up when the count gets to their number.

TEACHER SAY: **That was a tricky movement math today, but you did so well! We'll try it again tomorrow.**

Learn (25-30 mins)

Directions

1. **TEACHER DO:** Write the number 3 on the board. Display the **Sky Writing** Grid.

TEACHER SAY: Look at the number I just wrote. It is a 3. Show me 3 using your fingers.

STUDENTS DO: Show 3 on their fingers.

TEACHER SAY: Now clap 3 times.

STUDENTS DO: Clap 3 times.

TEACHER SAY: Great, now let's practice writing the number 3. I would like ______ (name of student) to come up and help me. First, watch us Sky Write it together.

STUDENTS DO: Stand in the **Sky Writing** position. Selected student helps the teacher model **Sky Writing**.

STUDENTS DO: Stand in the **Sky Writing** position.

TEACHER DO: Use the lines on the **Sky Writing** grid to review how to Sky Write a 3.

TEACHER SAY: Now you try it. Let's Sky Write the number 3 three times.

STUDENTS DO: Sky Write the number 3 three times.

2. **TEACHER SAY: Today we are continuing to create our counting books. What number did we write in our counting book yesterday?**

STUDENTS DO: Respond together: 2.

TEACHER SAY: That's correct! Yesterday we wrote the number 2 in our counting book and drew picture of 2 eyes.

TEACHER DO: Hand out counting books to students.

TEACHER SAY: Find the page where you wrote 2 and drew 2 eyes.

STUDENTS DO: Find the page where they wrote 2 and drew 2 eyes.

TEACHER SAY: Now turn the page to the next blank page. That is where you will write 3.

STUDENTS DO: Turn to the next blank page in their counting books.

TEACHER SAY: Write the number 3 in your counting book on this page.

STUDENTS DO: Write 3 in their counting books.

TEACHER DO: Walk around and check progress. Offer help to students if needed.

3. **TEACHER SAY: If mommy gives you 3 choices of ice cream, you can make a strawberry, vanilla, and chocolate cone.**

TEACHER DO: Hold up the counting book and point to the page where students should draw 3 scoops of ice cream on a cone. Model this by drawing 3 scoops of ice cream on the board and labeling each scoop by number.

STUDENTS DO: Draw 3 scoops of ice cream to represent the number 3.

TEACHER DO: Walk around and assist students with pictures as needed.

TEACHER SAY: **Great work class! Tomorrow we will write a new number in our counting books. Raise your hands if you think you know what number is next.**

STUDENTS DO: Raise hands if they know the next number.

TEACHER DO: Call on a student to predict the next number.

TEACHER SAY: **Yes, it is 4! Great thinking!**

4. TEACHER DO: Collect counting books. Distribute students' dot card sets.

TEACHER SAY: **Today you are going to work with your Shoulder Partner to practice dot cards. You will take turns showing each other a dot card. When your partner shows you a dot card, you will clap the number of dots on the card. Then it is your partner's turn. Let's practice together.**

TEACHER DO: Borrow a card from a student's set and hold it up so all students can see it.

STUDENTS DO: Clap the number of dots on the card together.

TEACHER SAY: **Great job! You will have about 5 minutes to practice together.**

TEACHER DO: After about 5 minutes, collect students' dot card sets and prepare for Share.

Share (5 mins)

Directions

1. TEACHER DO: Have students **Turn and Talk** to their **Shoulder Partner** about how they like to use dot cards. What do they learn from them? Are there any other kinds of dot card play we should try?

STUDENTS DO: **Turn and Talk** to their **Shoulder Partner** about how they like to use dot cards.

TEACHER SAY: **Raise your hand if you have some ideas you want to share with your colleagues.**

STUDENTS DO: Selected students share ideas.

TEACHER DO: Take note of students' thinking and ideas for dot card games and practice. Praise all students who shared their thinking.

Lesson 35 Overview

OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write number 4 • Represent quantities of 4 using drawings or objects.	• Counting • Create • Four • Double checking • Bigger	• No new preparation needed.

MATERIALS

Calendar Math Area



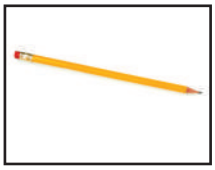
Counting Books



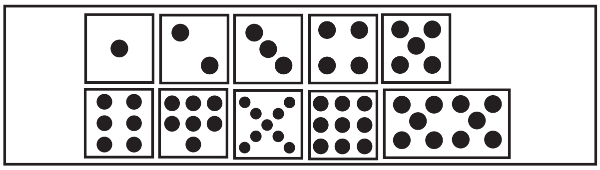
Crayons



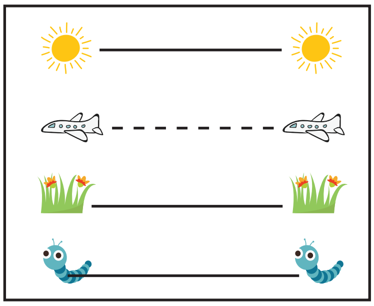
Pencils



Large Dot Cards (Teacher set)



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ **(name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month

- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

TEACHER DO: Prepare for movement math. Review and practice the counting and movement pattern from the previous day. See Day 34 for instructions, if needed.

STUDENTS DO: Participate in counting and movement math. Remain standing for **Sky Writing** review.

Learn (25-30 mins)

Directions

1. TEACHER DO: Write the number 4 on the board. Display the **Sky Writing** Grid.

TEACHER SAY: **Look at the number I just wrote. It is a 4. Show me 4 using your fingers.**

STUDENTS DO: Hold up 4 fingers.

TEACHER SAY: **Clap 4 times.**

STUDENTS DO: Clap 4 times.

TEACHER SAY: **Great! Let's practice writing the number 4. I would like ______ (name of student) to come up and help me. First, watch us Sky Write it together.**

STUDENTS DO: Stand in the **Sky Writing** position. Selected student helps the teacher model **Sky Writing**.

TEACHER DO: Use the lines on the **Sky Writing** grid to review how to Sky Write a 4.

TEACHER SAY: **Now you try it. Let's Sky Write the number 4 three times.**

STUDENTS DO: Sky Write the number 4 three times.

2. TEACHER SAY: **Today we are continuing to create our counting books. What number did we write in our counting book yesterday?**

STUDENTS DO: Respond together: 3.

TEACHER SAY: **That's correct! Yesterday we wrote the number 3 in our counting book and created a picture of 3 scoops of ice cream on a cone. Can you hold up 3 fingers?**

STUDENTS DO: Hold up 3 fingers.

TEACHER DO: Hand out counting books to students.

TEACHER SAY: **What number is 1 more than 3? Can you turn and tell your Shoulder Partner what 1 more than 3 is?**

STUDENTS DO: **Turn and talk** to their partners.

TEACHER SAY: **What is one more than 3?**

STUDENTS DO: Respond together: 4.

TEACHER SAY: That's right! 4 is 1 more than 3. Today we are going to write the number 4. Let's all write the number 4 one more time together in the palms of our hands.

STUDENTS DO: Write the number 4 in their palm with index finger.

TEACHER SAY: Great, now open up your counting book to the page where you wrote the number 3. Then turn the page.

STUDENTS DO: Turn to the next blank page in their counting books.

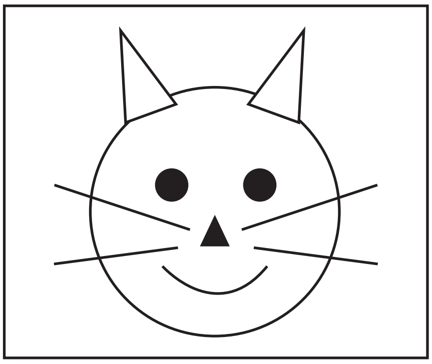
TEACHER SAY: Write the number 4 in your counting book.

STUDENTS DO: Write 4 in their counting books.

TEACHER DO: Walk around and check progress. Offer help, if needed.

TEACHER SAY: Watch me. I'm going to use shapes to make a picture.

TEACHER DO: Talk about each shape as you draw a cat: Draw a circle for a cat face. Draw 2 circle eyes. Draw a triangle nose and ears. Draw lines to make whiskers and a curved line to make a smile.



TEACHER SAY: Now you draw 4 cats in your counting book on the page with the 4.

STUDENTS DO: Draw 4 cats in their counting books.

TEACHER DO: Walk around and monitor students' work. Offer help, if needed. As students work, prepare your set of dot cards. When students are finished working, have them set aside their counting books to use during Share.

TEACHER SAY: Let's do something different with dot cards. I am going to show you a dot card. You will tell me how many dots there are as quickly as you can.

TEACHER DO: Flash a dot card for 3-4 seconds.

STUDENTS DO: Call out the quantity together.

TEACHER DO: Confirm the quantity, then tape the card to the board.

TEACHER SAY: Now I am going to show you another card. This time I want you to tell me whether the card is more or less than the card on the board. I am going to show it to you more quickly, so pay attention!

TEACHER DO: Flash next card for 2-3 seconds.

STUDENTS DO: Call out more or less together.

TEACHER DO: Confirm correct answer.

TEACHER SAY: This card is ______ (more/less) than the card on the board. How many dots on this card?

STUDENTS DO: Call out the answer together.

TEACHER DO: Confirm correct answer.

TEACHER DO: Repeat for the remaining cards. Flash each card, students compare it quickly to the card on the board and quickly determine whether it is more or less, and call out the answer. Confirm their answer, then confirm the quantity.

STUDENTS DO: Follow the procedure for all cards.

TEACHER SAY: **Great job! We used our dot cards in a new way and you are getting so good at knowing how many dots are on each card. Let's talk about our learning together.**

Share (5 mins)

Directions

1. **TEACHER SAY:** **Open your counting books to the page where you drew your 4 cats. Turn to your Shoulder Partner. You will switch books and double check your work. Watch as I model what to do.**

TEACHER DO: Borrow a student's counting book and show the class where they have drawn 4 cats.

TEACHER SAY: **I will check ______'s (name of student) work buy touching each cat and counting: 1, 2, 3, 4. Great! You drew 4 cats! Now you practice double checking.**

STUDENTS DO: Exchange counting books and double check each other's work.

TEACHER SAY: **Great job, give me a thumbs up if your partner drew 4 cats.**

STUDENTS DO: Give thumbs up.

TEACHER SAY: **Wonderful, what you just did was called double checking. Double checking is what good math students do to make sure they did their work properly. Now I will collect your counting books. Great work today!**

TEACHER DO: Collect counting books.

Lesson 36 Overview

OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Sky write numbers 0-10 • Write number 5 • Represent quantities of 5 using drawings or objects	• Double check • Five • Strategy	• No new preparation needed.

MATERIALS

Calendar Math Area



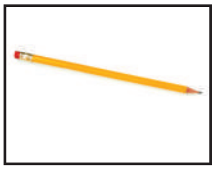
Counting Books



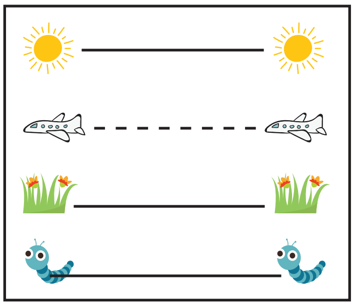
Crayons



Pencils



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ **(name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

TEACHER DO: Prepare for movement math.

TEACHER SAY: **Are you ready to do movement math?**

TEACHER SAY: **Let's do Movement Math! Stand up and make sure you have room. We've done this one before, but let's see how much better at it you are now!**

STUDENTS DO: Stand up.

TEACHER DO: Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY:

- **Hop 1 time.**
- **Put your arms up 2 times.**
- **Touch your toes 3 times.**
- **Do 4 jumping jacks.**
- **Pretend you're a bird and spread your wings. Flap your wings 5 times.**
- **Pretend you're a frog on a lily pad. Squat down low. Now hop 6 times.**
- **Pretend you're in the army. Stand straight and tall and march in place 7 times.**
- **Now we're in a boat. Grab your paddle and row 8 times.**
- **Pretend there is a tall lemon tree. Now reach up as high as you can and pick 9 lemons. Reach very high!**
- **Have a seat. Pretend you have a big pot and we will stir it 10 times.**

STUDENTS DO: Follow each direction, doing each movement the correct number of times

TEACHER SAY: **Very good imaginations! Give your brain a high five.**

TEACHER DO: Pats head.

STUDENTS DO: Pat their head.

Learn (25-30 mins)

Directions

1. TEACHER SAY: **Now, let's practice our number writing. We are going to turn our fingers into feathers again We will use our feathers to gently write our numbers on the backs of our Shoulder Partners. Get ready.**

STUDENTS DO: Hold up **Sky Writing** arms.

TEACHER SAY: **Today my special feather writes in green. Your feather can write in any color you want. The student with the longer hair will go first. Remember to be gently like a feather. Let's start by counting 0 and Sky Writing the number 0.**

STUDENTS DO: Sky Write the number 0 and say 0.

TEACHER DO: Repeat the steps above for numbers 1-10.

TEACHER SAY: **Superb job Sky Writing! Now let's switch. The other partner can practice writing the numbers 0-10.**

STUDENTS DO: Practice **Sky Writing** the numbers 0-10 on the backs of their partners

2. TEACHER DO: Write the number 5 on the board. Display the **Sky Writing** Grid.

TEACHER SAY: Look at the number I just wrote. It's a 5. Show me how much 5 is using your fingers.

STUDENTS DO: Hold up 5 fingers.

TEACHER SAY: We just wrote the number 5, so let's practice writing it in our hands. Hold up the hand you write with. Now turn your other hand into a sheet of paper. Use your pencil finger to write a 5 on your paper hand.

STUDENTS DO: Write the number 5 in their hands.

TEACHER SAY: Great work!

TEACHER SAY: Today we are continuing to create our counting books. What number did we write in our counting book yesterday?

STUDENTS DO: Respond together: 4.

TEACHER SAY: That's correct! Yesterday we wrote number four in our counting book and drew 4 cats. As soon as you get your counting book, find the page where you drew 4 cats. Then turn to the next page.

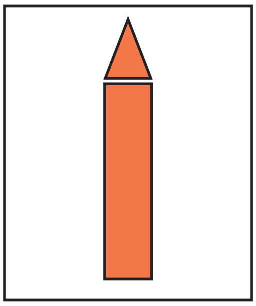
TEACHER DO: Hand out counting books to students.

TEACHER DO: Hold up a counting book and point to the page you want students to write the number 5.

TEACHER SAY: Write the number 5 in your counting book on this page.

STUDENTS DO: Write 5 in their counting books.

TEACHER DO: Walk around and check progress. Offer help, if needed.



TEACHER SAY: On the board I am going to draw 5 crayons. If I have 1 red crayon, 1 blue crayon, 1 yellow crayon, 1 green crayon, and 1 purple crayon, I have 5 crayons. 1, 2, 3, 4, 5. Crayons look like long rectangles with triangles on top. Draw 5 crayons in your counting book. Then color them any colors you like.

TEACHER DO: Draw 5 crayons on the board.

STUDENTS DO: Draw and color 5 crayons in their counting books.

TEACHER DO: Walk around and help students, as needed. As students finish, collect their counting books. Consider allowing students who finish early to play one of the number activities from the 10 celebration or work with the tactile number cards.

Share (5 mins)

Directions

1. **TEACHER SAY: I would like to hear about how you are using math at home. It could be shapes, counting, comparing, writing numbers, using a calendar – anything we have been doing in class! Take a moment to think about it.**

STUDENTS DO: Think for about 30 seconds. Give thumbs up if they have ideas to share.

TEACHER DO: Call on students with thumbs up.

STUDENTS DO: Share how they are using math in their personal lives.

TEACHER DO: Take note of ways students are using math outside the classroom. Consider creating a bulletin board or display to share with the rest of the school how your students are using math.

Lesson 37 Overview

OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write number 6 • Represent quantities of 6 using drawings or objects.	• 1 more than • Mathematician • Six	• No new preparation needed.

MATERIALS

Calendar Math Area



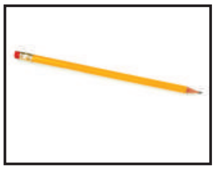
Counting Books



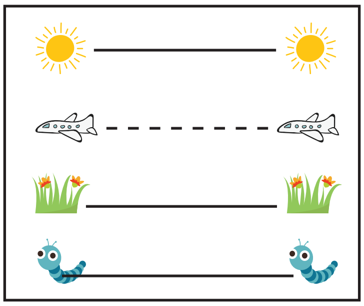
Crayons



Pencils



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **_______ (name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, _______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

TEACHER DO: Prepare for movement math.

TEACHER SAY: **Today we are going to stand up and march and count to 10. I will show you by marching and counting first. Then we will do it together.**

TEACHER DO: Model marching and counting movement, each footfall receives a number: right foot down - 1, left foot down – 2, right foot down – 3, and so on.

TEACHER SAY: **Alright it is your turn. Everyone stand and march and count together. We will count to 10 three times.**

STUDENTS DO: March and count to 10 three times with the teacher.

TEACHER SAY: **Great job! Stay standing for Sky Writing.**

Learn (25-30 mins)

Directions

1. TEACHER SAY: **Today we are going to write the number that is 1 more than 5. Show me 5 fingers.**

STUDENTS DO: Hold up 5 fingers.

TEACHER SAY: **Good job. Now add 1 more finger. How many fingers are you showing now?**

STUDENTS DO: Count fingers. Answer together: 6.

TEACHER SAY: **Yes, 1 more than 5 is 6! Let's clap our hands 6 times while counting to the number 6.**

STUDENTS DO: Clap their hands 6 times while counting.

TEACHER SAY: **Now, stomp your feet 6 times.**

STUDENTS DO: Stomp their feet 6 times while counting.

TEACHER SAY: **Now pat your head 6 times.**

STUDENTS DO: Pat their heads 6 times while counting.

2. TEACHER DO: Write the number 6 on the board. Display the **Sky Writing** Grid.

TEACHER SAY: **Let's practice writing the number 6. First, we will Sky Write it together. Show me your Sky Writing position.**

STUDENTS DO: Stand in the **Sky Writing** position.

TEACHER DO: Use the lines on the **Sky Writing** grid to review how to Sky Write a 6.

TEACHER SAY: **Let's Sky Write 6 three times.**

STUDENTS DO: Sky Write the number 6 three times.

TEACHER SAY: **Great work! Let's practice writing the number 6 in our counting books. When you get your counting book, open it to the page where you drew 5 crayons. Then, turn to the next clean page.**

TEACHER DO: Hand out counting books.

TEACHER SAY: **Write the number 6 in your counting book on this page.**

STUDENTS DO: Write 6 in their counting books.

TEACHER DO: Walk around and check progress. Help students, if needed.

TEACHER SAY: **Those are great sixes! For some reason, that reminds me of last weekend. Last weekend, I went to Giza and I saw 3 very big pyramids and 3 small pyramids. I'm going to draw them on the board.**

TEACHER DO: Draw 3 big triangles and 3 small triangles on the board.

TEACHER SAY: **How many pyramids did I see all together? Give me a thumbs up if you think you know.**

TEACHER DO: Call on students with thumbs up.

STUDENTS DO: Selected students share their answers.

TEACHER DO: If no students figure it out, be sure to explain how to get the answer.

TEACHER SAY: **I know! If I count all of the big pyramids and the small ones, I will know how many I saw!**

TEACHER DO: Point to and count aloud the pyramids.

TEACHER SAY: **6! I saw 6 pyramids! Let's draw 6 pyramids in our counting books. Color them whatever colors you like.**

STUDENTS DO: Draw 6 triangles in their counting books.

TEACHER DO: Walk around and check progress. Help students, if needed.

TEACHER SAY: **When you and your Shoulder Partner are finished, double check each other's work.**

STUDENTS DO: Check **Shoulder Partner**'s work.

TEACHER DO: Collect counting books.

Share (5 mins)

Directions

1. **TEACHER SAY:** **I would like to hear more about how you are using math at home. It could be shapes, counting, comparing, writing numbers, using a calendar – anything we have been doing in class! Take a moment to think about it.**

STUDENTS DO: Think for about 30 seconds. Give thumbs up if they have ideas to share.

TEACHER DO: Call on students with thumbs up.

STUDENTS DO: Share how they are using math in their personal lives.

TEACHER DO: Take note of ways students are using math outside the classroom. Consider creating a bulletin board or display to share with the rest of the school how your students are using math.

Lesson 38 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count from 1 to 10
- Write number 7
- Represent quantities of 7 using drawings or objects
- Discuss the role of making mistakes in mathematics

STUDENT VOCABULARY

- Seven

LESSON PREPARATION FOR THE TEACHER

- No new preparation needed.

MATERIALS

Calendar Math Area



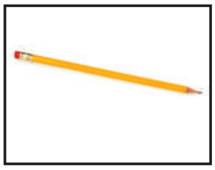
Counting Books



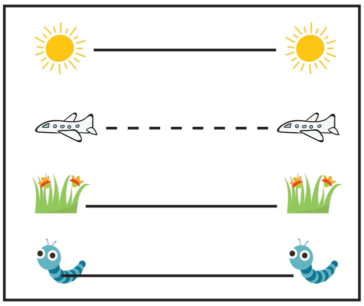
Crayons



Pencils



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ **(name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:
- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: **Let's move around! Stand up and make sure you have room for Movement Math.**

STUDENTS DO: Stand up.

TEACHER DO: Give the movement directions below (or substitute movements you prefer). Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY: **Let's take our Movement Math to the zoo! I am going to give you a direction and a number of times to do it. Listen carefully!**

- **Stand on 1 leg like a flamingo.**
- **Pretend you are a lion and roar 2 times.**
- **Pretend you are a kangaroo. Jump 3 times.**
- **Pretend you are a crocodile. Use your arms to chomp down 4 times.**
- **Pretend you are a turtle. Stick your head out of your shell 5 times.**
- **Reach up and pull 6 stars down from the sky.**
- **Pretend you are an elephant and stomp 7 times.**
- **Pretend you are a giraffe and eat 8 leaves overhead.**
- **Pretend you are an eagle and flap your giant wings 9 times.**
- **Pretend you are a gorilla and beat your chest 10 times.**

STUDENTS DO: Follow each direction, doing each movement the correct number of times

TEACHER SAY: **Very good imaginations! Give your brain a high five.**

TEACHER DO: Pat head.

STUDENTS DO: Pat their head.

Learn (25-30 mins)

Directions

1. TEACHER DO: Write the number 7 on the board. Display the **Sky Writing** Grid.

TEACHER SAY: **Look at the number I just wrote. It's a 7. Show me 7 using your fingers. How many hands do you need?**

STUDENTS DO: Show 7 fingers. Respond together: two hands.

TEACHER SAY: **Let's look at 7 a different way. Can I have some volunteers? Please raise your hand if you would like to help.**

TEACHER DO: Call on 4 boys and 3 girls to stand at the front of the room. (You can use a different combination of students, but will need to adjust the following conversation.)

TEACHER SAY: **Let's count all of the people in this group.**

TEACHER DO: Point to each person in the group as you count aloud.

TEACHER SAY: **How many people are in this group?**

STUDENTS DO: Respond together: 7.

TEACHER SAY: **I am going to move the students around so they are standing in a different**

order. Give me a thumbs up if you think we will still have 7. Give me a thumbs down if you think the number of students will change.

STUDENTS DO: Make predictions.

TEACHER DO: Move the students around so they are standing in a different order.

TEACHER SAY: **Do we still have 7 students? Let's count together.**

STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: **Even though they are in standing in a different order, we still have 7 students in our group. I'm going to put all the girls together so we have a group of girls and a group of boys. Now will we still have 7 students in the group? Give me a thumbs up if you think we will still have 7. Give me a thumbs down if you think the number of students will change.**

STUDENTS DO: Make predictions.

TEACHER DO: Move the girls together and slightly apart from the boys.

TEACHER SAY: **Let's count just the girls.**

STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: **There are 3 girls. Now let's count just the boys.**

STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: **There are 4 boys. But, do I still have 7 students up here? Let's count! Help me count as I point to each one.**

STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: **A group of 3 and a group of 4 make 7. What if I move them around? Would I still have 7? Give me a thumbs up if you think we will still have 7. Give me a thumbs down if you think the number of students will change.**

STUDENTS DO: Make predictions.

TEACHER DO: Move students around into a group of 2 and 5. Have students help you count aloud the number of students in each group, then count all of them together.

TEACHER SAY: **A group of 2 and group of 5 also make 7. Did anyone think the number would change? Raise your hand to explain your thinking.**

STUDENTS DO: Raise their hands and explain their thinking to the class.

TEACHER SAY: **Did any of you think one thing at the beginning and then change your mind? Changing your mind means that at first you thought it was one thing, but then you changed it and thought the answer was something else. Please raise your hand if you changed your mind about whether or not our group would stay at 7 people?**

STUDENTS DO: Raise their hands.

TEACHER SAY: **Good learners learn more from their mistakes than anything else. Can someone explain why they changed their mind?**

STUDENTS DO: Raise their hand and explain how they changed their minds.

TEACHER SAY: **Thank you for your thinking. Let's count our 7 students as they sit back down.**

STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: Today we are going to write the number 7 in our counting books, but first let's practice Sky Writing it together. Show me your Sky Writing position.

STUDENTS DO: Stand in the **Sky Writing** position.

TEACHER DO: Use the lines on the **Sky Writing** grid to review how to Sky Write a 7.

TEACHER SAY: Now you try it. Let's Sky Write the number 7 three times.

STUDENTS DO: Sky Write the number 7 three times.

TEACHER DO: Hand out counting books to students.

TEACHER SAY: Find the page where you drew 6 triangles. Then, turn to the next page and write the number 7.

STUDENTS DO: Write 7 in their counting books.

TEACHER DO: Walk around and check progress. Offer help, if needed.

TEACHER SAY: I had so much fun counting to 7 with you today. It really made me smile! Watch as I draw a smiley face on the board.



TEACHER DO: Draw a smiley face on the board. Talk through the steps aloud.

TEACHER SAY: Now you draw 7 smiley faces in your counting book. You can color them any colors you like.

STUDENTS DO: Draw seven smiley faces to represent the number 7.

TEACHER DO: Walk around and assist students with pictures as needed.

TEACHER SAY: Great work class!

Share (5 mins)

Directions

1. TEACHER SAY: Let's talk about changing our minds. Is it a good thing or a bad thing to change our minds in math class? Why do you think so? Think for a moment, then Turn and Talk to your Shoulder Partner.

STUDENTS DO: Think, then **Turn and Talk** to their partners.

TEACHER SAY: Now, I would like to hear your thinking. Give me a thumbs up if you have some thoughts you would like to share.

STUDENTS DO: Give thumbs up to volunteer. Selected students share their thinking about changing their minds.

TEACHER DO: Listen to students' thinking. Take note of their perspectives. Some students may still think that it is a bad thing to change your mind or make mistakes. That is okay. Continue to address this topic in conversations so they hear the thinking of their colleagues.

Lesson 39 Overview

OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Sky write numbers 0-10 • Write number 8 • Represent quantities of 8 using drawings or objects. • Discuss the role of mistakes in mathematics	• Eight	• No new preparation needed.

MATERIALS

Calendar Math Area



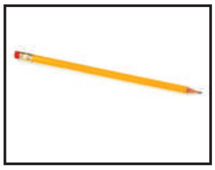
Counting Books



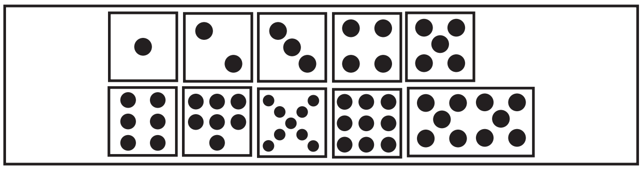
Crayons



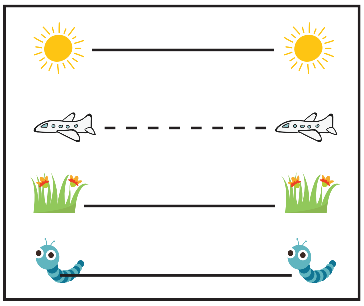
Pencils



Large Dot Cards (Teacher set)*
*Time permitting



Sky Writing grid



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **______ (name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, _______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: **Today we are going to practice counting to 10 while pretending to bounce a ball. Watch how I can move my hand up and down pretending there is a ball under it.**

TEACHER DO: Model pretending to bounce a ball under one hand.

TEACHER SAY: **Every time I push my hand down I will say a number. Watch as I count while bouncing: 1, 2, 3. Can you show me how you pretend to bounce a ball?**

STUDENTS DO: Practice bouncing a ball with their hands.

TEACHER SAY: **Great, now let's count to 10 together as we bounce.**

STUDENTS DO: Count to 10 with the teacher while pretending to bounce a ball.

TEACHER DO: Please, sit down.

STUDENTS DO: Sit down.

Learn (25-30 mins)

Directions

1. TEACHER SAY: **In a moment we are going to Sky Write all the numbers we have learned so far. Before we do that, I'm going to Sky write a mystery number. See if you can guess the numbers I am Sky writing.**

TEACHER DO: Sky write a familiar number between 0 and 10, saying the steps slowly out loud but not naming the number.

STUDENTS DO: Observe.

TEACHER SAY: **What number did I write? Raise your hand if you think you know.**

STUDENTS DO: Raise hands to answer. Selected students guess the number.

TEACHER DO: Repeat this guessing game with two more numbers.

TEACHER SAY: **Awesome! Now it's your turn to write. Sky writing arms ready? Let's write numbers 0-10!**

STUDENTS DO: Stand and hold out a straight arm with two fingers pointing.

TEACHER DO: Lead students in **Sky Writing** the numbers 0-10 once more before moving on.

2. TEACHER SAY: **Today we are continuing to create our counting books. What number did we write in our counting book yesterday?**

STUDENTS DO: Respond together: 7.

TEACHER SAY: That's correct! Yesterday we wrote number 7 in our counting book and drew 7 smiley faces.

TEACHER DO: Hand out counting books to students. Have students find the page where they wrote 7 and then turn to the next clean page.

TEACHER SAY: Today we are going to write the number 8. Show me 8 using your fingers.

STUDENTS DO: Show 8 on their fingers.

TEACHER SAY: Great job! We just practiced Sky Writing 8 a moment ago, but let's practice one more time before we write in our counting books. Hold up the hand you write with. Now turn your other hand into a sheet of paper. Use your pencil finger to write an 8 on your paper hand.

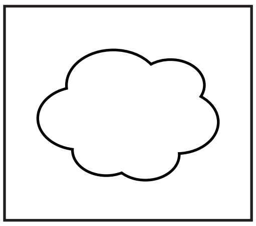
STUDENTS DO: Write an 8 in the palms of their hands.

TEACHER SAY: Good practice! Now, write the number 8 in your counting books.

STUDENTS DO: Write 8 in their counting books.

TEACHER DO: Walk around and check progress. Help students, if needed.

TEACHER SAY: Great job writing the number 8. Now close your eyes and imagine we are lying outside on the ground. It is a beautiful day and the sky is blue. Eight fluffy clouds float by. I'm going to draw one fluffy cloud on the board.



TEACHER DO: Draw a fluffy cloud on the board.

TEACHER SAY: Now, you draw 8 fluffy clouds in your counting books on the same page where you drew your number 8.

STUDENTS DO: Draw 8 clouds in their journals.

TEACHER DO: Walk around and check progress. Help students, if needed.

TEACHER SAY: When you are done, ask your Shoulder Partner to double check your work.

STUDENTS DO: Double check each other's work.

TEACHER DO: Collect counting books. If time allows, practice dot cards with students. Hold up a large dot card for a few seconds, turn it face down, and ask students to identify how many dots were on the card.

Share (5 mins)

Directions

1. TEACHER SAY: Lovely counting today! Yesterday we talk about changing our minds in math class and how sometimes we make mistakes. You talked with your Shoulder Partners and your colleagues about whether or not it was good to make mistakes and change our minds. I would like to hear more from you on that. Is it okay to make mistakes? Is it okay to change our minds about our answers? Why or why not? Why do people sometimes think making a mistake in math is bad? Think for a moment, then give a thumbs up if you would like to share your thinking.

STUDENTS DO: Think for a moment, then give a thumbs up if they would like to share their thinking. If selected, answer the teacher's questions and share their thinking.

TEACHER DO: Call on students with thumbs up. Listen to students and provide support and praise to students who share their thinking. Some students may still be struggling with the idea that mistakes can lead to learning opportunities. Consider how to pair those students with colleagues who are comfortable making mistakes and talking about the lessons they learn from them.

Lesson 40 Overview

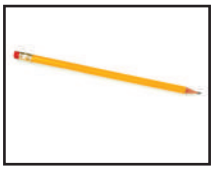
OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write number 9 • Represent quantities of 9 using drawings or objects.	• Nine	• No new preparation needed.

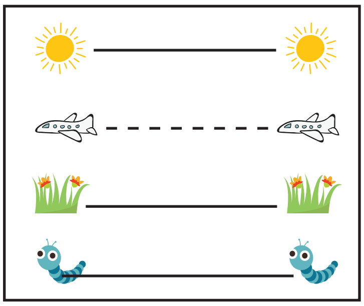
MATERIALS

Calendar Math Area 

Counting Books 

Crayons 

Pencils 

Sky Writing grid 

Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ (name of the student) is going to help us with our calendar math.

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: **Today we are going to practice counting to 10 by snake counting. Watch as I say the number one while moving my arms like a snake.**

TEACHER DO: Move hand and arm forward like a slithering snake while saying the number 1.

TEACHER SAY: **Now I will use my other arm to make a snake and say the number 2.**

TEACHER DO: Move hand and arm forward like a slithering snake while saying the number 2.

TEACHER SAY: **We will switch arms with each number. Are you ready to count like a snake? Let's snake count together.**

STUDENTS DO: Count to 10 with the teacher while pretending to move alternating arms like snakes.

TEACHER SAY: **We are now going to Sky Write our numbers.**

Learn (25-30 mins)

Directions

1. TEACHER DO: Display the **Sky Writing** Grid. Write the number 9 on the board.

TEACHER SAY: **Look at the number I just wrote. It is a 9. How me 9 using your fingers.**

STUDENTS DO: Show 9 using their fingers.

TEACHER SAY: **Let's clap 9 times as we count to 9.**

STUDENTS DO: Clap and count aloud with the teacher.

TEACHER SAY: **Great! Now, let's practice writing the number 9. First, we will Sky Write it together, but I would like someone to help me.**

TEACHER DO: Use **Calling Sticks** to select a helper.

STUDENTS DO: Selected student goes to the front of the room.

TEACHER SAY: **Show me your Sky Writing position.**

STUDENTS DO: Stand in the **Sky Writing** position.

TEACHER DO: Use the lines on the **Sky Writing** grid to review how to Sky Write a 9.

TEACHER SAY: **Now you try it. Let's Sky Write the number 9 three times.**

STUDENTS DO: Sky Write the number 9 three times.

TEACHER DO: Hand out the counting books. Have students open to the page where they wrote the number 8 and then turn to the next blank page.

STUDENTS DO: Turn to the next blank page in their counting books.

TEACHER SAY: **Write the number 9 in your counting books.**

STUDENTS DO: Write 9 in their counting books.

TEACHER DO: Walk around and monitor students' progress. Offer help, if needed.

TEACHER SAY: Now, please close your eyes and imagine yourself outside, lying on the ground relaxing. You are looking at the beautiful sky. Suddenly, 9 balloons float by! They are so colorful! Open your eyes and draw 9 balloons in your counting books. Color them any colors you like.

STUDENTS DO: Draw and color 9 balloons.

TEACHER DO: Walk around and monitor students' progress. Offer help, if needed.

TEACHER SAY: When you are finished, you and your Shoulder Partner should double check each other's work.

STUDENTS DO: Double check their **Shoulder Partner**'s work.

TEACHER DO: Collect counting books.

Share (5 mins)

Directions

1. TEACHER SAY: Turn and talk to your Shoulder Partner about something you learned in math class in the last day or week. I will give you about a minute to talk.

STUDENTS DO: Turn and talk to **Shoulder Partner**s.

TEACHER SAY: Give me a thumbs up if you have something you would like to share. However, if you have not been sharing lately, I might call on you anyway, so think about something you want to say about what you have been learning.

STUDENTS DO: Selected students talk about their learning.

TEACHER DO: Take note of skills and concepts students mention. Clarify any misconceptions and try to correct any misunderstandings. If necessary, remind students that it is okay to make mistakes and that it good to learn from them.

KINDERGARTEN I

Mathematics

CHAPTER 5

Lessons 41-50

Overview

Lessons 50-51

COMPONENT	DESCRIPTION	TIME
Calendar and Movement	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills. Students explore quantity and practice counting through patterns and movement.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from colleagues' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY:

- Count by ones up to 10.
- Read and write numerals from 0 to 10.
- Write numbers and represent quantities with a number.
- Represent a number (0-5) by producing a set of objects or pictures.
- Identify the number of objects in familiar groupings without counting.
- Understand the concepts of greater than, less than, and equal to with up to 5 objects
- Compare two numbers between 1 and 10 presented as objects, drawings, etc.

OPERATIONS AND ALGEBRAIC THINKING:

- Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, or verbal explanations, expressions, or equations.

Day 41-50 Pacing Guide

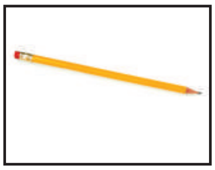
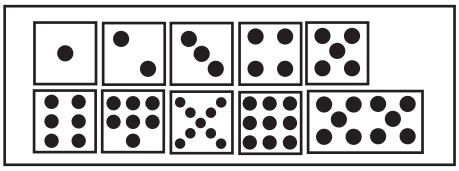
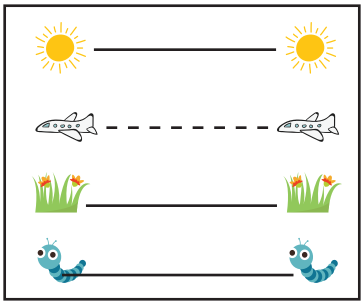
LESSON	INSTRUCTIONAL FOCUS
41	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 10 • Represent quantities of 10 using drawings or objects • Demonstrate understanding of the relationship between number and quantity
42	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Share counting books with colleagues • Act out an addition story problem • Describe how they will use their counting books at home
43	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 1 • Describe a group of objects or pictures using the term equal • Identify equal groups
44	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 2 • Describe a group of objects or pictures using the term equal • Identify equal groups
45	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 3 • Demonstrate understanding of the relationship between number and quantity
46	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 4 • Act out an addition story problem • Explain how they solved a story problem

LESSON	INSTRUCTIONAL FOCUS
47	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 5 • Compare quantities using the term less than
48	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 6 • Compare quantities using the term less than
49	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 7 • Compare quantities using the term greater than
50	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 8 • Compare quantities using the term greater than

Lesson 41 Overview

OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write number 10 • Represent quantities of 10 using drawings or objects • Demonstrate understanding of the relationship between number and quantity	• Left • Right • Ten	• No new preparation needed.

MATERIALS

Calendar Math Area		Counting Books	
Pencils		Crayons	
Large Dot Cards (Teacher set)			
Sky Writing grid			

Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ (name of the student) is going to help us with our calendar math.

TEACHER DO: Let the student help walk the class through the routine. They should do the

following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: **Today we are going to practice counting and clapping from right to left. We will stand up and clap and count after I show you how this movement works.**

TEACHER DO: Model clapping right to left while counting to 10. Repeat three times.

TEACHER SAY: **Everyone stand and clap and count with me. We will count to 10 three times.**

STUDENTS DO: Clap and count aloud with the teacher three times.

TEACHER SAY: **Great job! Stay standing for Sky Writing practice.**

Learn (25-30 mins)

Directions

1. TEACHER DO: Display the **Sky Writing** Grid. Write the number 10 on the board.

TEACHER SAY: **Look at the number I just wrote. It's a 10. Show me 10 using your fingers.**

STUDENTS DO: Show 10 on their fingers.

TEACHER SAY: **Today we are going to write the number 10 in our counting books, but first we will Sky Write it together. I would like someone to come up and Sky Write it with me.**

TEACHER DO: Use **Calling Sticks** to select a student.

STUDENTS DO: Selected student goes to the front of the room with the teacher. All stand in the **Sky Writing** position.

TEACHER DO: Use the lines on the **Sky Writing** grid to review the steps for writing a 10 as the helper student demonstrates for classmates.

TEACHER SAY: **Now, everyone Sky Write the number 10 three times.**

STUDENTS DO: Sky Write the number 10 three times.

TEACHER SAY: **Today we are continuing to create our counting books. What number did we write in our counting book yesterday?**

STUDENTS SAY: Respond together: 9.

TEACHER SAY: **That's correct! Yesterday we wrote number 9 in our counting books and drew 9 balloons.**

2. TEACHER DO: Hand out counting books to students. Have them find the page where they wrote 9 and then turn to the next clean page.

STUDENTS DO: Open counting books to the next clean page.

TEACHER SAY: **Write the number 10 in your counting book.**

STUDENTS DO: Write the number 10 in their counting books.

TEACHER DO: Walk around and check progress. Help students, if needed.

TEACHER SAY: **Since this is the last number we are going to write in our counting books, you can draw 10 of whatever you like. Make it something simple and draw 10 of them.**

TEACHER DO: Walk around the classroom to monitor students' progress. Offer help, as needed.

TEACHER SAY: **When you are finished, ask your Shoulder Partner to double check your work.**

STUDENTS DO: Have **Shoulder Partner**s check their work.

TEACHER SAY: **Keep your counting books out for Share today.**

3. TEACHER DO: Take out large dot cards.

TEACHER SAY: **Let's practice using our dot cards again. The last time we practiced together, you told me whether a number was more or less than the card on the board. This time I want you to see if you can tell me how many dots are on the card without counting. Get ready.**

TEACHER DO: Show each card for 3 seconds. Then ask students to respond together, saying the number of dots on the card. Confirm the correct answer each time.

STUDENTS DO: Try to determine the number of dots on the dot cards without counting. Call out the answer when prompted.

Share (5 mins)

Directions

1. TEACHER DO: Have students **Turn and Talk** to their **Shoulder Partner** about your favorite page in your counting book. Explain why it is your favorite page.

STUDENTS DO: Talk with their **Shoulder Partner**s about their favorite pages.

TEACHER DO: Use **Calling Sticks** to select students to share their favorite pages with the class.

Lesson 42 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count from 1 to 10
- Share counting books with colleagues
- Act out an addition story problem
- Describe how they will use their counting books at home

STUDENT VOCABULARY

- Addition

LESSON PREPARATION FOR THE TEACHER

- No new preparation needed

MATERIALS

Calendar Math Area



Counting Books



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ (name of the student) is going to help us with our calendar math.

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:
- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's clap right and left again today.

TEACHER DO: Review clapping pattern from previous day, if necessary.

TEACHER SAY: Everyone stand and join me in clapping and counting.

STUDENTS DO: Stand and do clapping and counting movement with the teacher.

TEACHER SAY: Great job! Please, sit down.

STUDENTS DO: Sit down.

Learn (25-30 mins)

Directions

1. TEACHER SAY: In our last math lesson, you created the final page in your counting book. Today we are going to share our books with our colleagues. I am going to split the class into small groups. Once you are in your group, take turns showing each other your counting books. Talk about your favorite pages and numbers and why they are your favorite.

TEACHER DO: Hand out counting books. Then, divide students into small groups of 3-5, depending on the size of your class.

STUDENTS DO: Move to sit with their assigned small group. Show each other their counting books and discuss their favorite pages and numbers.

TEACHER DO: Walk around and listen to students' conversations.

TEACHER SAY: Today you will be taking your counting books home. I want you to show them to your family members and show them how you can count from 0 to 10, write numbers 0 through 10, and draw pictures to show how many! Use your counting book every day to practice counting to 10 and writing numbers 0-10.

TEACHER DO: At the end of the school day, send counting books home with students.

2. TEACHER SAY: You have gotten so good at counting. I wonder if you can help me solve a problem. I am inviting friends over for a party, but I cannot figure out how many invitations I need to send out. Can you help me?

STUDENTS DO: Confirm they can help.

TEACHER SAY: I want to invite 3 friends I met when I was younger. Can I get 3 of you to come up and pretend to be my 3 old friends? Raise your hands.

STUDENTS DO: Raise hands to volunteer. Selected students come up.

TEACHER DO: Place 3 students in a group together.

TEACHER SAY: I also want to invite 3 new friends. Can I get 3 of you to come up and pretend to be my 3 new friends? Raise your hands.

STUDENTS DO: Raise hands to volunteer. Selected students come up.

TEACHER DO: Place 3 students in a group together.

TEACHER SAY: This is where I have a problem. I have these 3 old friends over here and these 3 new friends over here and I cannot figure out how many invitations I need to send out all together. What should I do? Turn and talk to your Shoulder Partner about your ideas.

STUDENTS DO: Turn and talk to **Shoulder Partner**s.

TEACHER DO: Walk around and listen to students' conversations. Take note of students who seem to have an early understanding of addition, or putting together.

TEACHER SAY: Give me a thumbs up if you have some ideas about how to solve my problem.

STUDENTS DO: Give a thumbs up if they have ideas. Selected students share their thinking.

TEACHER DO: Talk to students about their ideas. Ask questions to help guide their thinking, such as Am I putting people together or taking people away? Should I have more than 3 invitations by the time I'm done?

Take note of strategies students try: putting together, counting on, using fingers, drawing objects, etc. Allow students to come up and demonstrate if they want to. If students identify adding the friends together as a solution, confirm and demonstrate.

If students do not identify that as a solution, build on something someone said to help you appear to realize what needs to be done.

TEACHER SAY: Yes! If I put these two groups of friends together and count them, I will know exactly how many invitations to send out. Help me count.

STUDENTS DO: Count aloud to 6 with the teacher.

TEACHER SAY: I need to send out 6 invitations! Three and three makes six. Thank you so much for your help! You helped me solve a kind of math problem called addition. When we solve addition problems, we put numbers together. We will try more addition problems another day.

Share (5-10 mins)

Directions

1. **TEACHER SAY: Today you are taking home your beautiful counting books. How will you use them at home?**

TEACHER DO: Use **Calling Sticks** to select students to share their ideas.

STUDENTS DO: Selected students discuss how they will use their counting books at home.

Lesson 43 Overview

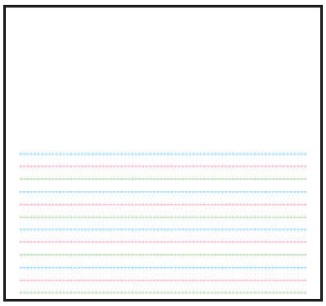
OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write number 1 • Compare quantities using the term equal • Identify equal groups	• Backward • Equal • Forward • Left • Right	• Draw three separate grid lines on the board as shown below. • Gather, create, or print out primary writing paper with grid lines as shown in the Lesson Materials section. • If possible, write sample 1's and dotted line 1's on the paper on the first row of grid lines before making copies.

MATERIALS

Calendar Math Area



Primary Writing paper



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **______ (name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: **Today we are going to march and count. We will march forward two times counting 1, 2. Next we will march backwards two times counting 3, 4. We will then march to the right two times counting 5, 6. Next we will march left two times counting 7, 8. Last we will count forward again counting 9, 10. Watch me and join in when you are ready.**

TEACHER DO: Model new marching counting movement. Go slowly and repeat several times until all students have joined in.

STUDENTS DO: Repeat marching and counting movement with the teacher.

TEACHER SAY: **Great job! That was a tricky one!**

Learn (25-30 mins)

Directions

Note for the Teacher: During this activity it is important to help students learn proper pencil holding grip.

1. TEACHER DO: Write a 1 on the writing grid on the board. Leave your 1 on the board when you erase the students' work and redraw the lines.

TEACHER SAY: **Look at the number I just wrote. It is a 1.**

TEACHER DO: Tell students the lines help us make sure we write numbers correctly. Explain how the number touches the top and bottom grid lines. Write another 1, explaining how you are using the lines.

TEACHER SAY: **I'm going to give each of you a chance to come up and write a 1 on the board. While your colleagues are writing on the board, you will be writing on a practice sheet. Take your time and write some good 1's!**

TEACHER DO: Hand out writing paper to students. Call students to the board 3, 4, or 5 at a time, depending on how much room you have and how long the lines are that you drew.

STUDENTS DO: Seated students write 1's on their papers. Selected students come to the board in groups and write the number using the grid lines you drew on the board.

TEACHER DO: Check the work of students at the board, offering help as needed. Erase their work, redraw the grid lines as needed, and call the next group of students to the board. Repeat until all students have had a turn at the board.

As seated students work, walk around and help them correct their grips and erase and fix errors. Remind frustrated students that they are just learning and will get better over time.

TEACHER SAY: **When I call you (or your table/group/row), bring me your practice paper.**

TEACHER DO: Call students up with their sheets. Write their names on the sheets and save the papers so you can track their progress over time.

STUDENTS DO: Return to their seats.

2. TEACHER DO: Write the word equal on the board.

TEACHER SAY: **I have written a new vocabulary word on the board. The word is equal. Let's say the word together.**

STUDENTS DO: Say the word equal with the teacher.

TEACHER SAY: **Does anyone know what the word equal means?**

STUDENTS DO: Raise hands to respond. Selected students answer the question.

TEACHER SAY: If two things are equal, they are the same. In math, if numbers or are equal, they are worth the same amount. I am going to use the Calling Sticks to select 3 students.

TEACHER DO: Use **Calling Sticks** to select 3 students to come to the front of the room.

STUDENTS DO: Selected students walk up to the front for the modeling activity.

TEACHER DO: Give each selected student 2 pencils and have them hold the pencils in the air so their colleagues can see.

TEACHER SAY: Your colleagues each have 2 pencils. They have the same number of pencils. They have an equal number of pencils.

TEACHER DO: Take 1 pencil away from one of the students.

TEACHER SAY: Do the students have and equal number of pencils now?

STUDENTS DO: Raise hands to volunteer to answer the question.

TEACHER DO: Use **Calling Sticks** to select students to answer.

TEACHER SAY: I took 1 pencil away from ______ (name of student), so now your colleagues do not have an equal number of pencils.
Now you and your Shoulder Partner will use your fingers to demonstrate equal fingers. Your partner will hold up some fingers. You will hold up an equal number of fingers on your hand. Watch, I'll show you. I am going to hold up some fingers. Then you hold and equal number of fingers.

TEACHER DO: Hold up 3 fingers.

STUDENTS DO: Hold up 3 fingers in the air.

TEACHER SAY: Great job! Please work with your Shoulder Partner. Repeat this activity four times using different finger amounts to come up with equal numbers. Take turns!

STUDENTS DO: Shoulder Partners work together.

TEACHER DO: Walk around the room and monitor students as they work. Offer help, as needed.

TEACHER SAY: Good job! Remember equal means having the same number.

Share (5 mins)

Directions

1. **TEACHER DO:** Have students **Turn and Talk** to their **Shoulder Partner** about what they learned today in math.

STUDENTS DO: Discuss what they learned today in math.

Key Area: Movement & Motor Skills

The Development Of Appropriate Pencil Grip

When children first begin to draw using crayons, pencils or brushes they use a dagger grasp. In a natural developmental sequence they will hold the writing implement in a variety of grasps until they settle on a functional tripod grip for handwriting. The developmental sequence is a result of neurological and physical growth in the child.

As we look below at the development of different grasps and drawing skills we can observe that there is a natural progression as the child's fine motor skills develop. The complexity of the drawing skills increases as the child develops more control over the pencil or crayon in his or her hand.

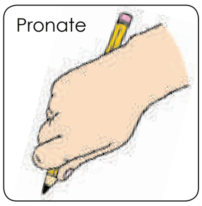
12 Months to 2 Years

- Development of fine pinch grip and precise release of small objects
- Both hands develop skilled function and work together
- Crayon is held initially in the palm ***(Palmar Supinate or Dagger grasp pictured right).*** Movement mainly occurs from shoulder, the arm and hand move as a unit.
- Makes marks on paper with crayon
- Vigorous scribble in imitation
- Scribbles spontaneously
- Draws a stroke then obliterates by scribbling
- Imitates drawing a vertical line


Dagger

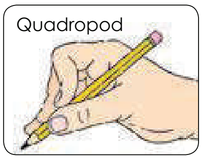
2 Years To 3 Years

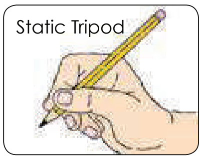
- Crayon or tools may be held across all fingers, with the palm facing down. ***Digital Pronate grasp (pictured right)*** movement mainly occurs at the elbow, the forearm and hand move as a unit.
- Imitates drawing a circle
- Copies a horizontal line
- Copies a vertical line
- Draws 2 or more strokes when attempting to copy a cross


Pronate

3 Years To 4 Years

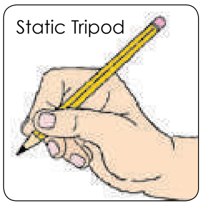
- The fingers (often all four) are held on the pencil shaft opposite the thumb. ***Quadropod grasp (pictured top right)***.Movement can occur from the wrist, the hand moves as a unit with the fingers static. ***Static Tripod grasp (pictured bottom right)***. Adjustments to the pencil are made with the opposite hand (3½ - 4 years).
- Copies a circle
- Imitates a horizontal cross
- Imitates a zig zag line
- Joins two dots
- Draws a diagonal stroke by following a continuous dotted line
- Traces over a diamond shape (rounded corners)
- Draws a man with a head and one other body part e.g. arms, legs
- Traces and stays on most of the time a 7cm wide horizontal line.


Quadropod


Static Tripod

4 Years To 6 Years

- Child developing ability to manipulate objects between the fingers and palm and rotate objects with the fingers.
- Uses a ***Static Tripod grasp (pictured right)*** of a pencil consistently
- Developing fine control to manipulate a pencil
- The thumb, index and middle fingers work as a unit for precise control of the pencil, the ring and little fingers provide support. Horizontal movement across the page occurs at the wrist elbow and shoulder (4½ to 6 years).
- Copies a diagonal line, a square, a diagonal cross, circle and triangle
- Draws a man with a head, arms and legs
- Colours in a simple picture staying mainly within the lines (no more than 0.6 cm)
- Draws a man with a head, trunk, arms, legs, feet and three facial features
- Connects a series of dots to make a simple drawing


Static Tripod

See the following pages for more information.

116 Parry Street, Perth WA 6000, Australia • T: +61 (08) 9227 0846 • F: +61 (08) 9227 0865 • www.pld-literacy.org • mail@pld-literacy.org

PLD's programs that develop the above skills can be viewed by searching the codes: **Mpw, WBpw, Ppw, Mhu4, Mprd, Mlff/Mlfc, DSPPf/DSPPc, DSY1f/DSY1c** on **www.pld-literacy.org**

Lesson 44 Overview

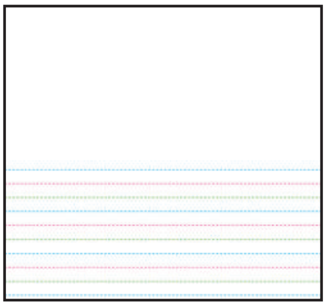
OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write number 2 • Compare quantities using the term equal • Identify equal groups	• Equal	• Draw three separate grid lines on the board as shown below. • Gather, create, or print out primary writing paper with grid lines as shown in the Lesson Materials section. • If possible, write sample 2's and dotted line 2's on the paper on the first row of grid lines before making copies. • Gather sets of 10 objects for students to use as counters (one set per pair of students). Examples: beans, dry pasta, stones, buttons, math counters, blocks, connecting cubes.

MATERIALS

Calendar Math Area



Primary Writing paper



Bags or cups of 10 counting objects (one set per pair of students) (See Lesson Preparation for the Teacher for instructions and examples.)



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ **(name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?

STUDENTS DO: Thank the calendar helper.

TEACHER DO: Prepare for movement math.

2. TEACHER SAY: **Let's do the counting and movement pattern we did yesterday.**

TEACHER DO: Review the pattern, if needed. Refer to Day 43 for directions.

TEACHER SAY: **Everyone stand. When I say begin, we will march forward, backwards, right, left, and forward and count to 10 as we march. We will repeat our counting and movement pattern three times.**

STUDENTS DO: Repeat marching and counting movement three times with the teacher.

TEACHER SAY: **Great job! We will practice this movement again tomorrow, but now we are going to write our numbers using the board.**

Learn (25-30 mins)

Directions

Note for the Teacher: During this activity it is important to help students learn proper pencil holding grip.

1. TEACHER DO: Write a 2 on the writing grid on the board. Leave your 2 on the board when you erase the students' work and redraw the lines.

TEACHER SAY: **Look at the number I just wrote. It is a 2.**

TEACHER DO: Tell students the lines help us make sure we write numbers correctly. Explain how the number touches the top and bottom grid lines. Write another 2, explaining how you are using the lines.

TEACHER SAY: **I'm going to give each of you a chance to come up and write a 2 on the board. While your colleagues are writing on the board, you will be writing on a practice sheet. Take your time and write some good 2's!**

TEACHER DO: Hand out writing paper to students. Call students to the board 3, 4, or 5 at a time, depending on how much room you have and how long the lines are that you drew.

STUDENTS DO: Seated students write 2's on their papers. Selected students come to the board in groups and write the number using the grid lines you drew on the board.

TEACHER DO: Check the work of students at the board, offering help as needed. Erase their work, redraw the grid lines as needed, and call the next group of students to the board. Repeat until all students have had a turn at the board.

As seated students work, walk around and help them correct their grips and erase and fix errors. Remind frustrated students that they are just learning and will get better over time.

TEACHER SAY: **When I call you (or your table/group/row), bring me your practice paper.**

TEACHER DO: Call students up with their sheets. Write their names on the sheets and save the papers so you can track their progress over time.

STUDENTS DO: Return to their seats.

2. TEACHER DO: Hand out sets of counting objects to students.

TEACHER SAY: In our last math lesson, we talked about the meaning of equal. Who can remind us what equal means?

STUDENTS DO: Raise hands to answer. Selected student explains the meaning of equal.

TEACHER SAY: I am going to draw some objects on the board. You are your partner use your counters to create a set equal to the set of objects I drew on the board.

TEACHER DO: Draw a set of objects on the board (between 1 and 10). Give students a minute or so to create a set of counters equal to the set the teacher drew on the board.

STUDENTS DO: Work with **Shoulder Partners** to create a set of objects equal to the set the teacher drew on the board.

TEACHER DO: Walk around the room to monitor students' work.

TEACHER SAY: Give me a thumbs up if you created a set of ______ objects.

STUDENTS DO: Give a thumbs up if they got the right answer.

TEACHER DO: Repeat a number of times (as long as the lesson allows). Continue to monitor students' work, answering questions and offering help as needed.

STUDENTS DO: Continue to work with their **Shoulder Partners** to create sets of objects equal to the number of objects the teacher draws on the board.

TEACHER SAY: You did such a great job! You really understand what equal means!

TEACHER DO: Collect counters.

Share (5 mins)

Directions

1. **TEACHER SAY: When do you think it might be happy to understand what equal means? I will give you a minute to think. Give me a thumbs up when you are ready.**

STUDENTS DO: Think for a moment, then give a thumbs up to say they are ready.

TEACHER SAY: Call on students with their thumbs up.

STUDENTS DO: Selected students share their thinking about when knowing the meaning of equal might be important.

Lesson 45 Overview

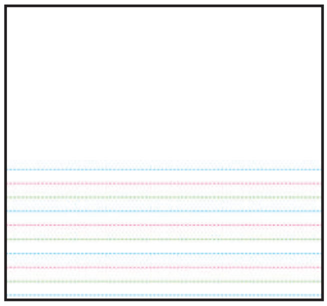
OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write number 3 • Demonstrate understanding of the relationship between number and quantity	• No new vocabulary. Review vocabulary as needed.	• Draw three separate grid lines on the board as shown below. • Gather, create, or print out primary writing paper with grid lines as shown in the Lesson Materials section. • If possible, write sample 3's and dotted line 3's on the paper on the first row of grid lines before making copies.

MATERIALS

Calendar Math Area



Primary Writing paper



Set of counting games and activities and tactile number writing paper

Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ (name of the student) is going to help us with our calendar math.

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's do Movement Math! Today, let's reach up to the sky and down to our toes as we count. Watch me and join in once you know the pattern.

TEACHER DO: Count 1 and reach up with both arms, count 2 and reach down to your toes, count 3 and reach up with both arms, count 4 and reach down to your toes. Continue counting and moving to 10.

STUDENTS DO: Follow the counting and movement pattern along with the teacher.

TEACHER SAY: Great job! Give yourselves a pat on the back.

STUDENTS DO: Pat their backs.

Learn (25-30 mins)

Directions

Note for the Teacher: During this activity it is important to help students learn proper pencil holding grip.

1. TEACHER DO: Write a 3 on the writing grid on the board. Leave your 3 on the board when you erase the students' work and redraw the lines.

TEACHER SAY: Look at the number I just wrote. It is a 3.

TEACHER DO: Tell students the lines help us make sure we write numbers correctly. Explain how the number touches the top and bottom grid lines. Write another 3, explaining how you are using the lines.

TEACHER SAY: I'm going to give each of you a chance to come up and write a 3 on the board. While your colleagues are writing on the board, you will be writing on a practice sheet. Take your time and write some good 3's!

TEACHER DO: Hand out writing paper to students. Call students to the board 3, 4, or 5 at a time, depending on how much room you have and how long the lines are that you drew.

STUDENTS DO: Seated students write 3's on their papers. Selected students come to the board in groups and write the number using the grid lines you drew on the board.

TEACHER DO: Check the work of students at the board, offering help as needed. Erase their work, redraw the grid lines as needed, and call the next group of students to the board. Repeat until all students have had a turn at the board.

As seated students work, walk around and help them correct their grips and erase and fix errors. Remind frustrated students that they are just learning and will get better over time.

TEACHER SAY: When I call you (or your table/group/row), bring me your practice paper.

TEACHER DO: Call students up with their sheets. Write their names on the sheets and save the papers so you can track their progress over time.

STUDENTS DO: Return to their seats.

TEACHER SAY: You have been working so hard on writing your numbers. Let's take a few minutes today to practice counting using our activities. You and your partners can get an activity from _______ (wherever you are storing them) and play. You may also get a set of counters and work with your partner to make equal groups.

STUDENTS DO: Get activities and games or counters to practice counting for the last few minutes of math class.

TEACHER DO: Walk around the room to monitor students as they do math activities together.

STUDENTS DO: Clean up and return materials to _______ (storage place).

Share (5 mins)

Directions

1. **TEACHER DO:** Have students **Turn and Talk** to their **Shoulder Partner** about what they learned today in math.

STUDENTS DO: Discuss what they learned today in math.

Lesson 46 Overview

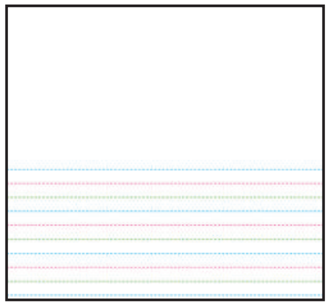
OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write number 4 • Act out an addition story problem • Explain how they solved a story problem	• Four	• Draw three separate grid lines on the board as shown below. • Gather, create, or print out primary writing paper with grid lines as shown in the Lesson Materials section. • If possible, write sample 4's and dotted line 4's on the paper on the first row of grid lines before making copies.

MATERIALS

Calendar Math Area



Primary Writing paper



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **______ (name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

TEACHER DO: Prepare for movement math.

TEACHER SAY: We are going to count and clap today. We will count from 1 to 10. We clap equal to the amount of the number we are counting. So, when we count 1, we will clap 1 time. When we count 2, we will clap 2 times, and so on all the way to 10. We will do it two times. Let's begin!

STUDENTS DO: Clap and count with the teacher two times.

TEACHER SAY: Great job counting today! It is time to practice writing our numbers.

Learn (25-30 mins)

Directions

Note for the Teacher: During this activity it is important to help students learn proper pencil holding grip.

1. TEACHER DO: Write a 4 on the writing grid on the board. Leave your 4 on the board when you erase the students' work and redraw the lines.

TEACHER SAY: Look at the number I just wrote. It is a 4.

TEACHER DO: Tell students the lines help us make sure we write numbers correctly. Explain how the number touches the top and bottom grid lines. Write another 4, explaining how you are using the lines.

TEACHER SAY: I'm going to give each of you a chance to come up and write a 4 on the board. While your colleagues are writing on the board, you will be writing on a practice sheet. Take your time and write some good 4's!

TEACHER DO: Hand out writing paper to students. Call students to the board 3, 4, or 5 at a time, depending on how much room you have and how long the lines are that you drew.

STUDENTS DO: Seated students write 4's on their papers. Selected students come to the board in groups and write the number using the grid lines you drew on the board.

TEACHER DO: Check the work of students at the board, offering help as needed. Erase their work, redraw the grid lines as needed, and call the next group of students to the board. Repeat until all students have had a turn at the board.
As seated students work, walk around and help them correct their grips and erase and fix errors. Remind frustrated students that they are just learning and will get better over time.

TEACHER SAY: When I call you (or your table/group/row), bring me your practice paper.

TEACHER DO: Call students up with their sheets. Write their names on the sheets and save the papers so you can track their progress over time.

STUDENTS DO: Return to their seats.

2. TEACHER SAY: I have another problem I would like you to help me solve. I have a new bookshelf that will hold 8 books, but I am not sure how many books I have all together. Can you help me figure out how many books I have?

STUDENTS DO: Confirm they can help.

TEACHER SAY: I have 3 picture books. Can I get 3 of you to come up and pretend to be my 3 picture books? Raise your hands.

STUDENTS DO: Raise hands to volunteer. Selected students come up.

TEACHER DO: Place 3 students in a group together.

TEACHER SAY: I also want to invite 4 science books. Can I get 4 of you to come up and pretend to be my 4 science books? Raise your hands.

STUDENTS DO: Raise hands to volunteer. Selected students come up.

TEACHER DO: Place 4 students in a group together.

TEACHER SAY: **This is where I have a problem. Will my bookshelf hold all of my books or do I have too many? How can I find out? Turn and talk to your Shoulder Partner about your ideas.**

STUDENTS DO: **Turn and talk** to **Shoulder Partner**s.

TEACHER DO: Walk around and listen to students' conversations. Take note of students who seem to have an early understanding of addition, or putting together.

TEACHER SAY: **Give me a thumbs up if you have some ideas about how to solve my problem.**

STUDENTS DO: Give a thumbs up if they have ideas. Selected students share their thinking.

TEACHER DO: Talk to students about their ideas. Ask questions to help guide their thinking, such as How many books will my shelf hold? Am I putting books together or taking books away?

Take note of strategies students try: putting together, counting on, using fingers, drawing objects, etc. Allow students to come up and demonstrate if they want to. If students identify adding the friends together as a solution, confirm and demonstrate.

If students do not identify that as a solution, build on something someone said to help you appear to realize what needs to be done.

TEACHER SAY: **Yes! If I put these two sets of books together and count them, I will know whether or not my bookshelf will hold all of my books. Help me count.**

STUDENTS DO: Count aloud to 7 with the teacher.

TEACHER SAY: **I have 7 books! Three and four make seven. Will my bookshelf hold 7 books?**

STUDENTS DO: Respond together: Yes.

TEACHER SAY: **Yes! Thank you so much for your help!**

Share (5 mins)

Directions

1. **TEACHER SAY:** **How can you tell the book problem was a putting together problem? How did you know? Turn to your Shoulder Partner and talk about your ideas together.**

STUDENTS DO: Turn to their **Shoulder Partner**s and talk about how they knew the problem was a putting together problem.

TEACHER SAY: **Give me a thumbs up if you want to share your ideas.**

STUDENTS DO: Give a thumbs up if they want to share. Selected students talk about how they knew the problem was a putting together problem.

TEACHER DO: Listen to students explain their strategy. Clear up misconceptions and praise innovative thinking.

Lesson 47 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count from 1 to 10
- Write number 5
- Compare amounts using less than

STUDENT VOCABULARY

- Compare
- Equal
- Less than

LESSON PREPARATION FOR THE TEACHER

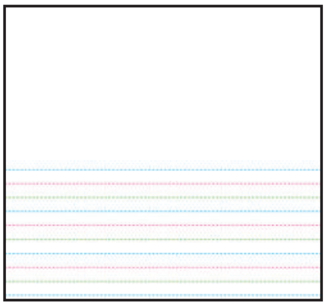
- Draw three separate grid lines on the board as shown below.
- Gather, create, or print out primary writing paper with grid lines as shown in the Lesson Materials section.
- If possible, write sample 5's and dotted line 5's on the paper on the first row of grid lines before making copies.
- Gather sets of 10 objects for students to use as counters (one set per pair of students). Examples: beans, dry pasta, stones, buttons, math counters, blocks, connecting cubes.

MATERIALS

Calendar Math Area



Primary Writing paper



Bags or cups of 10 counting objects (one set per pair of students) (See Lesson Preparation for the Teacher for instructions and examples.)



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ **(name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:
- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

TEACHER DO: Prepare for movement math.

TEACHER SAY: **Let's do the counting and clapping pattern we did yesterday.**

TEACHER DO: Review the counting and clapping pattern from the previous lesson, if needed.

STUDENTS DO: Count and clap along with the teacher.

Learn (25-30 mins)

Directions

Note for the Teacher: During this activity it is important to help students learn proper pencil holding grip.

1. TEACHER DO: Write a 5 on the writing grid on the board. Leave your 5 on the board when you erase the students' work and redraw the lines.

TEACHER SAY: **Look at the number I just wrote. It is a 5.**

TEACHER DO: Tell students the lines help us make sure we write numbers correctly. Explain how the number touches the top and bottom grid lines. Write another 5, explaining how you are using the lines.

TEACHER SAY: **I'm going to give each of you a chance to come up and write a 5 on the board. While your colleagues are writing on the board, you will be writing on a practice sheet. Take your time and write some good 5's!**

TEACHER DO: Hand out writing paper to students. Call students to the board 3, 4, or 5 at a time, depending on how much room you have and how long the lines are that you drew.

STUDENTS DO: Seated students write 5's on their papers. Selected students come to the board in groups and write the number using the grid lines you drew on the board.

TEACHER DO: Check the work of students at the board, offering help as needed. Erase their work, redraw the grid lines as needed, and call the next group of students to the board. Repeat until all students have had a turn at the board.

As seated students work, walk around and help them correct their grips and erase and fix errors. Remind frustrated students that they are just learning and will get better over time.

TEACHER SAY: **When I call you (or your table/group/row), bring me your practice paper.**

TEACHER DO: Call students up with their sheets. Write their names on the sheets and save the papers so you can track their progress over time.

STUDENTS DO: Return to their seats.

TEACHER SAY: **You have done such a great job helping me solve problems. Can you help me again?**

STUDENTS DO: Confirm they can help.

TEACHER SAY: **My friend is taking me to the zoo. She says it costs less than 8 pounds to get in, but I am not sure what that means. Does anyone know what less than means? Give me a thumbs up if you think you know.**

STUDENTS DO: Give a thumbs up if they think they know. Selected students share what they know about less or less than.

TEACHER DO: Depending on what students say, make sure all students understand what less/less than means.

TEACHER SAY: **I know that less means a smaller number, so less than must mean it costs a smaller number than 8. Can you help me figure out what the price could be? I am going to give you and your partner some counters.**

TEACHER DO: Hand out math counters.

TEACHER SAY: **Make a set of 8 counters with your partner.**

STUDENTS DO: Make a set of 8 counters.

TEACHER SAY: **Now, I need to know all the numbers that are less than 8. That means smaller than. Work with your partner. Raise your hands when you think you have an answer.**

STUDENTS DO: Work with partner to find amounts less than 8.

TEACHER DO: Draw a 0-10 number line on the board. Circle 8. Then, walk around the room and monitor students' work. Offer help and answer questions, as needed.

TEACHER SAY: **While you were working, I drew a number line on the board. I am going to circle 8 to remind us that we are looking for numbers less than 8.**

STUDENTS DO: Raise hands when they have an answer.

TEACHER DO: Call on students with hands raised. If students' answers are correct, draw a square or triangle around the numbers they suggest. For example, if students say that 7 is less than 8, confirm and draw a triangle around 7. Continue until students have identified all numbers less than 8.

STUDENTS DO: Continue to work until they have identified all numbers less than 8.

TEACHER DO: Point at the numbers on the number line as you discuss all the numbers they found that are less than 8.

TEACHER SAY: **So, the numbers 7, 6, 5, 4, 3, 2, 1, and 0 are less than 8. So the ticket could cost any one of those amounts. Now I know how much money to bring with me. Thanks so much for your help!**

TEACHER DO: Collect counters.

Share (5 mins)

Directions

1. **TEACHER SAY:** **Tell me what you know about equal and less than.**

STUDENTS DO: Raise hands to volunteer. Selected students share what they know about equal and less than.

TEACHER DO: Take note of which students do and do not understand the concepts. Correct and misunderstandings or misconceptions. Ask questions to push students to think through their explanations, such as Can you give me an example? When did you see that? How do you know? What about ______ (opposite example)?

TEACHER SAY: **Thank you so much for sharing your learning. We will be talking more about less than again tomorrow.**

Lesson 48 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count from 1 to 10
- Write number 6
- Compare quantities using term less than

STUDENT VOCABULARY

- Compare
- Equal
- Less than

LESSON PREPARATION FOR THE TEACHER

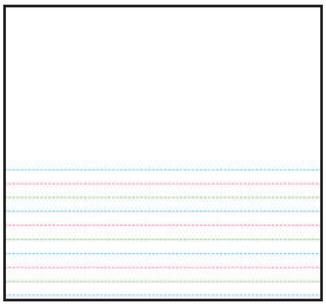
- Draw three separate grid lines on the board as shown below.
- Gather, create, or print out primary writing paper with grid lines as shown in the Lesson Materials section.
- If possible, write sample 6's and dotted line 6's on paper on first row of grid lines before making copies.

MATERIALS

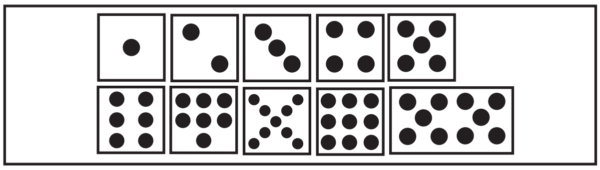
Calendar Math Area



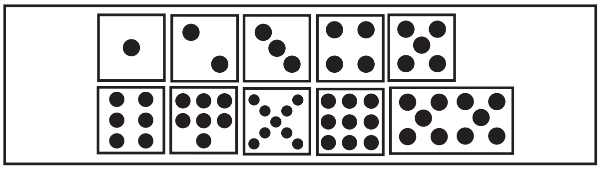
Primary Writing paper



Student Dot Card sets



Large Dot Cards (Teacher set)



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **______ (name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:
- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

TEACHER DO: Prepare for movement math.

TEACHER SAY: **Let's move around! Stand up and make sure you have room for Movement Math.**

STUDENTS DO: Stand up.

TEACHER DO: Give the movement directions below (or substitute movements you prefer). Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY: **Let's go back to the zoo! I am going to give you a direction and a number of times to do it. Listen carefully!**

- **Stand on 1 leg like a flamingo.**
- **Pretend you are a lion and roar 2 times.**
- **Pretend you are a kangaroo. Jump 3 times.**
- **Pretend you are a crocodile. Use your arms to chomp down 4 times.**
- **Pretend you are a turtle. Stick your head out of your shell 5 times.**
- **Reach up and pull 6 stars down from the sky.**
- **Pretend you are an elephant and stomp 7 times.**
- **Pretend you are a giraffe and eat 8 leaves overhead.**
- **Pretend you are an eagle and flap your giant wings 9 times.**
- **Pretend you are a gorilla and beat your chest 10 times.**

STUDENTS DO: Follow each direction, doing each movement the correct number of times

TEACHER SAY: **Very good imaginations! Give your brain a high five.**

TEACHER DO: Pat head.

STUDENTS DO: Pat their head.

Learn (25-30 mins)

Directions

Note for the Teacher: During this activity it is important to help students learn proper pencil holding grip.

1. TEACHER DO: Write a 6 on the writing grid on the board. Leave your 6 on the board when you erase the students' work and redraw the lines.

TEACHER SAY: **Look at the number I just wrote. It is a 6.**

TEACHER DO: Tell students lines help us make sure we write numbers correctly. Explain how the number touches the top and bottom grid lines. Write another 6, explaining how you are using the lines.

TEACHER SAY: **I'm going to give each of you a chance to come up and write a 6 on the board. While your colleagues are writing on the board, you will be writing on a practice sheet. Take your time and write some good 6's!**

TEACHER DO: Hand out writing paper to students. Call students to the board 3, 4, or 5 at a time, depending on how much room you have and how long the lines are that you drew.

STUDENTS DO: Seated students write 6's on their papers. Selected students come to the board in groups and write the number using the grid lines you drew on the board.

TEACHER DO: Check the work of students at the board, offering help as needed. Erase their work, redraw the grid lines as needed, and call the next group of students to the board. Repeat until all students have had a turn at the board.
As seated students work, walk around and help them correct their grips and erase and fix errors. Remind frustrated students that they are just learning and will get better over time.

TEACHER SAY: **When I call you (or your table/group/row), bring me your practice paper.**

TEACHER DO: Call students up with their sheets. Write their names on the sheets and save the papers so you can track their progress over time.

STUDENTS DO: Return to their seats.

2. TEACHER SAY: **Yesterday, you helped me solve a problem by finding all the numbers that are less than 8. Less than means the number is smaller than another number. You are going to work with a partner to show me how good you are at finding numbers that are less than another number. Instead of working with counters, you are going to work with your dot cards.**

TEACHER DO: Hand out dot cards to students.

TEACHER SAY: **Work with your partner to find a number that is less than 3. You only have to find one, but it is okay if you find more than one.**
Remember, you are finding less than 3, so the number will be smaller than 3. Give a thumbs up when you and your partner find a number less than 3.

TEACHER DO: **Display large 3 dot card.**

STUDENTS DO: **Work with their partners to look through the dot cards to find numbers less than 3. Give a thumbs up when they find a number less than 3.**

TEACHER DO: **Call on students to share their answers. Students should answer 1 and 2. Display the dot cards for correct answers when students find them. Point out that 2 and 1 do not have as many dots as the 3 dot card.**

TEACHER SAY: **Repeat after me: 2 is less than 3.**

STUDENTS DO: **Repeat: 2 is less than 3.**

TEACHER SAY: **Repeat: 1 is less than 3.**

STUDENTS DO: **1 is less than 3.**

TEACHER SAY: **Good job!**

TEACHER DO: **Repeat steps for other number between 1 and 10, as time allows. Then collect dot cards.**

Share (5 mins)

Directions

1. TEACHER SAY: **Today we worked on less than again. Have you ever talked about equal or the same or less than at home?**

TEACHER DO: Talk about a time when you discussed equal (the same) or less than at home. It can be a made-up story to help students understand when the concepts might be useful outside of math class. For example: When I was little I always got upset when I got less dessert than my sister. I wanted us to have an equal amount!

STUDENTS DO: Raise hands to volunteer. Selected students share about times they have talked about equal or less than outside of school.

TEACHER DO: Take note of which students do and do not understand the concepts. Correct and misunderstandings or misconceptions. Help build students' understanding that we learn math so that we can use it in the real world in a number of different ways.

TEACHER SAY: **Thank you so much for sharing your learning. I cannot wait to hear more about how you are using math at home and in other places outside of school!**

Lesson 49 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count from 1 to 10
- Write number 7
- Compare quantities using term greater than

STUDENT VOCABULARY

- Compare
- Equal
- Greater than
- Less than

LESSON PREPARATION FOR THE TEACHER

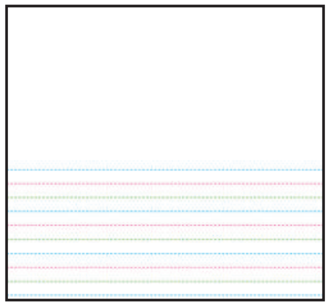
- Draw three separate grid lines on the board as shown below.
- Gather, create, or print out primary writing paper with grid lines as shown in the lesson Materials section.
- If possible, write sample 7's and dotted line 7's on paper on first row of grid lines before making copies.

MATERIALS

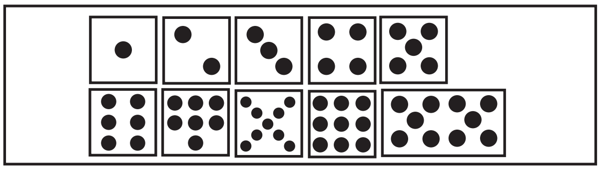
Calendar Math Area



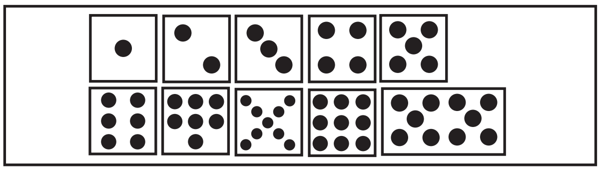
Primary Writing paper



Student Dot Card sets



Large Dot Cards (Teacher set)



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ **(name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's do Movement Math now! First I will stand and reach up to the sky to say 1, then I will touch my toes to say 2, then reach up again and say 3, then back down to my toes to say 4, and back up to say 5, and so on up to 10. Watch me and join in when you understand the pattern.

TEACHER DO: Stand, say 1 and reach up, say 2 and touch toes, say 3 and reach up, say 4 and touch toes, say 5 and reach up, and so on up to 10.

STUDENTS DO: Follow the pattern while counting.

TEACHER SAY: Good job with your up and down counting! Have a seat and give your brain a high five.

TEACHER DO: Pat head.

STUDENTS DO: Sit down and pat their heads.

Learn (25-30 mins)

Directions

Note for the Teacher: During this activity it is important to help students learn proper pencil holding grip.

1. TEACHER DO: Write a 7 on the writing grid on the board. Leave your 7 on the board when you erase the students' work and redraw the lines.

TEACHER SAY: Look at the number I just wrote. It is a 7.

TEACHER DO: Tell students the lines help us make sure we write numbers correctly. Explain how the number touches the top and bottom grid lines. Write another 7, explaining how you are using the lines.

TEACHER SAY: I'm going to give each of you a chance to come up and write a 7 on the board. While your colleagues are writing on the board, you will be writing on a practice sheet. Take your time and write some good 7's!

TEACHER DO: Hand out writing paper to students. Call students to the board 3, 4, or 5 at a time, depending on how much room you have and how long the lines are that you drew.

STUDENTS DO: Seated students write 7's on their papers. Selected students come to the board in groups and write the number using the grid lines you drew on the board.

TEACHER DO: Check the work of students at the board, offering help as needed. Erase their work, redraw the grid lines as needed, and call the next group of students to the board. Repeat until all students have had a turn at the board.

As seated students work, walk around and help them correct their grips and erase and fix errors. Remind frustrated students that they are just learning and will get better over time.

TEACHER SAY: When I call you (or your table/group/row), bring me your practice paper.

TEACHER DO: Call students up with their sheets. Write their names on the sheets and save the papers so you can track their progress over time.

STUDENTS DO: Return to their seats.

2. TEACHER DO: Hand out students' dot card sets. Have your set available.

TEACHER SAY: Today, you and your partner are going to play a game using your dot cards. I will show you how to play, but I need a volunteer. Raise your hand if you would like to help me.

STUDENTS DO: Raise their hands if they want to volunteer.

TEACHER DO: Call on a student with hands raised. Have the volunteer bring their dot card set with them.

TEACHER SAY: First we will shuffle our cards. ______ (name of student) will mix up their cards and I will mix up mine.

TEACHER DO: Show students how to shuffle their cards so they are not in numerical order. Show students how to put the cards back together in a neat stack.

TEACHER SAY: After we mix our cards up, we can play. In order to play, we need to know what greater than means. What do you think greater than means? Give me a thumbs up if you want to answer.

STUDENTS DO: Give a thumbs up if they think they know the answer. Selected students try to answer the question.

TEACHER DO: Depending on how students answer, make sure they understand that greater than means the number that is more, or larger.

TEACHER SAY: Greater than means more or the larger number. When you play the game, you will compare dot cards and see which card is greater than the other. The person who has the larger number takes the cards. Do not worry, you will get all of your cards back after the game. Let me show you how to play. First, we both turn over a dot card at the same time.

TEACHER DO: Turn over a dot card.

STUDENTS DO: Volunteer turns over a dot card.

TEACHER SAY: I have a ______. ______ (name of student) has a ______. Which one of us has the greater number?

STUDENTS DO: Call out answer.

TEACHER SAY: How do you know?

STUDENTS DO: Selected students explain how they know.

TEACHER DO: If necessary, point out that students can count the dots to see which card is greater than the other.

3. TEACHER SAY: So _____ wins the cards for that round. Then, we play again and put down two more cards. Whoever plays the dot card that is greater than the other person wins the cards. Now, it's your turn to play with your Shoulder Partner. Remember, you can always count the dots to see which number is greater than the other one.

STUDENTS DO: Play the game for as long as time allows.

TEACHER DO: Walk around and monitor students' conversations and strategies. At the end of the period, collect students' dot card sets.

Share (5 mins)

Directions

1. **TEACHER SAY:** **Tell me what you know about greater than, less than, and equal to.**

STUDENTS DO: Raise hands to volunteer. Selected students share what they know about equal and less than.

TEACHER DO: Take note of which students do and do not understand the concepts. Correct and misunderstandings or misconceptions. Ask questions to push students to think through their explanations, such as Can you give me an example? When did you see that? How do you know? What about ______ (opposite example)?

TEACHER SAY: **Thank you so much for sharing your learning. We will be talking more about greater than again tomorrow.**

Lesson 50 Overview

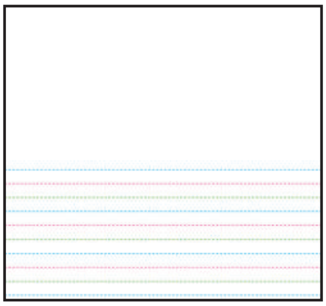
OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write number 8 • Compare quantities using the term greater than	• Compare • Equal • Greater than • Less than	• Draw three separate grid lines on the board as shown below. • Gather, create, or print out primary writing paper with grid lines as shown in the lesson Materials section. • If possible, write sample 8's and dotted line 8's on the paper on the first row of grid lines before making copies. • Gather sets of 10 objects for students to use as counters (one set per pair of students). Examples: beans, dry pasta, stones, buttons, math counters, blocks, connecting cubes.

MATERIALS

Calendar Math Area



Primary Writing paper



Bags or cups of 10 counting objects (one set per pair of students) (See Lesson Preparation for the Teacher for instructions and examples.)



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ **(name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: **We are going to hop as we count from 1 to 10 today. Please stand and do it with me. Stand on one foot! Let's begin.**

STUDENTS DO: Hop and count aloud with the teacher.

TEACHER DO: Repeat 2-3 times.

TEACHER SAY: **Great job counting today! It is time to practice writing our numbers.**

Learn (25-30 mins)

Directions

Note for the Teacher: During this activity it is important to help students learn proper pencil holding grip.

1. TEACHER DO: Write a 8 on the writing grid on the board. Leave your 8 on the board when you erase the students' work and redraw the lines.

TEACHER SAY: **Look at the number I just wrote. It is a 8.**

TEACHER DO: Tell students the lines help us make sure we write numbers correctly. Explain how the number touches the top and bottom grid lines. Write another 8, explaining how you are using the lines.

TEACHER SAY: **I'm going to give each of you a chance to come up and write a 8 on the board. While your colleagues are writing on the board, you will be writing on a practice sheet. Take your time and write some good 8's!**

TEACHER DO: Hand out writing paper to students. Call students to the board 3, 4, or 5 at a time, depending on how much room you have and how long the lines are that you drew.

STUDENTS DO: Seated students write 8's on their papers. Selected students come to the board in groups and write the number using the grid lines you drew on the board.

TEACHER DO: Check the work of students at the board, offering help as needed. Erase their work, redraw the grid lines as needed, and call the next group of students to the board. Repeat until all students have had a turn at the board.

As seated students work, walk around and help them correct their grips and erase and fix errors. Remind frustrated students that they are just learning and will get better over time.

TEACHER SAY: **When I call you (or your table/group/row), bring me your practice paper.**

TEACHER DO: Call students up with their sheets. Write their names on the sheets and save the papers so you can track their progress over time.

STUDENTS DO: Return to their seats.

2. TEACHER SAY: **Yesterday, you played a game where you put down two dot cards and figured out which dot card was greater than the other dot card. Remember that greater than means more or the larger number.**

Today, you are going to work with a partner to show me how good you are at finding numbers that are greater than another number. Instead of working with your dot cards, you are going to work with your counters.

TEACHER DO: Hand out sets of counters to pairs of students.

**TEACHER SAY: Work with your partner to find a number that is greater than 8. You only have to find one, but it is okay if you find more than one.
Remember, you are finding more than 8, so the number will be larger than 8. Give a thumbs up when you and your partner find a number less than 3.**

TEACHER DO: Draw 8 circles on the board so that all students can see them

STUDENTS DO: Work with their partners to use their counters and find numbers that are greater than 8. Give a thumbs up when they are ready.

TEACHER DO: Call on students to share their answers. Students should answer 9 and 10. Draw circles on the board to show students' correct answers. For example, if students answer 9, draw 9 circles on the board and compare them to your set of 8 circles.

TEACHER SAY: Repeat after me: 9 is greater than 8.

STUDENTS DO: Repeat: 9 is greater than 8.

TEACHER SAY: Repeat: 10 is greater than 8.

STUDENTS DO: 10 is greater than 8.

TEACHER SAY: Good job!

TEACHER DO: Repeat steps for other number between 1 and 10, as time allows. Then collect counters.

Share (5 mins)

Directions

1. TEACHER SAY: Today we worked on less than again. Have you ever talked about greater than at home?

TEACHER DO: Talk about a time when you discussed greater than at home. It can be a made-up story to help students understand when the concepts might be useful outside of math class.

STUDENTS DO: Raise hands to volunteer. Selected students share about times they have talked about equal or less than outside of school.

TEACHER DO: Take note of which students do and do not understand the concepts. Correct and misunderstandings or misconceptions. Help build students' understanding that we learn math so that we can use it in the real world in a number of different ways.

TEACHER SAY: Thank you so much for sharing your learning. I cannot wait to hear more about how you are using math at home and in other places outside of school!

KINDERGARTEN I

Mathematics

CHAPTER 6

Lessons 51-60

Overview

Lessons 51-60

COMPONENT	DESCRIPTION	TIME
Calendar and Movement	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills. Students explore quantity and practice counting through patterns and movement.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from colleagues' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY:

- Count by ones up to 10.
- Read and write numerals from 0 to 10.
- Write numbers and represent quantities with a number.
- Represent a number (0-5) by producing a set of objects or pictures.
- Identify the number of objects in familiar groupings without counting.

MEASUREMENT:

- Classify objects into given categories (for example length, weight, size, color) and sort categories by count.

Day 51-60 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
51	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 9 • Act out an addition story problem • Explain how they solved a story problem
52	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write number 10 • Act out a subtraction story problem • Differentiate between addition and subtraction problems
53	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write numbers 1 and 2 • Compare and classify objects by length • Collaborate with colleagues to collect data
54	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write numbers 3 and 4 • Compare and classify objects by length • Collaborate with colleagues to collect data
55	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write numbers 5 and 6 • Compare and classify objects by weight • Collaborate with colleagues to collect data
56	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write numbers 7 and 8 • Find objects of equal weight using a balance • Collaborate with colleagues to collect data
57	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write numbers 9 and 10 • Demonstrate understanding of the relationship between number and quantity

LESSON	INSTRUCTIONAL FOCUS
58	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write numbers 1-5 • Differentiate between addition and subtraction problems • Draw pictures to solve a subtraction story problem
59	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write numbers 6-10 • Differentiate between addition and subtraction problems • Draw pictures or use objects to solve a story problem
60	**Students will:** • Participate in Calendar Math • Count objects to tell how many there are to 10 • Demonstrate understanding of the relationship between number and quantity

Chapter Preparation for the Teacher

- On Day 60, students will celebrate their learning by playing the games and activities they played on Day 30. If you have made other games and activities, include them in the celebration materials. Also make available the tactile number writing practice cards and hanger balance with measuring materials. Consider making extra sets of the games and activities so more students can play.

Lesson 51 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count from 1 to 10
- Write number 9
- Act out an addition story problem
- Explain how they solved a story problem

STUDENT VOCABULARY

- Compare
- Equal
- Fewer
- More

LESSON PREPARATION FOR THE TEACHER

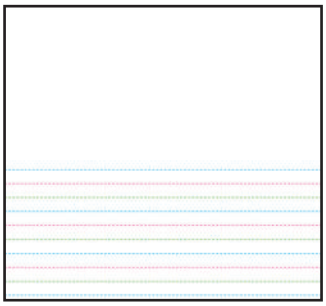
- Draw three separate grid lines on the board as shown below.
- Gather, create, or print out primary writing paper with grid lines as shown in the lesson Materials section.
- If possible, write sample 9's and dotted line 9's on the paper on the first row of grid lines before making copies

MATERIALS

Calendar Math Area



Primary Writing paper



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ (name of the student) is going to help us with our calendar math.

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:
- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: Today we are going to march and count. We will march forward two times

counting 1, 2. Next we will march backwards two times counting 3, 4. We will then march to the right two times counting 5, 6. Next we will march left two times counting 7, 8. Last we will count forward again counting 9, 10. Watch me and join in when you are ready.

TEACHER DO: Model marching counting movement. Go slowly and repeat several times until all students have joined in.

STUDENTS DO: Repeat marching and counting movement with the teacher.

TEACHER SAY: Great job! Please, sit down.

STUDENTS DO: Sit down.

Learn (25-30 mins)

Directions

Note for the Teacher: During this activity it is important to help students learn proper pencil holding grip.

1. TEACHER DO: Write a 9 on the writing grid on the board. Leave your 9 on the board when you erase the students' work and redraw the lines.

TEACHER SAY: Look at the number I just wrote. It is a 9.

TEACHER DO: Tell students the lines help us make sure we write numbers correctly. Explain how the number touches the top and bottom grid lines. Write another 9, explaining how you are using the lines.

TEACHER SAY: I'm going to give each of you a chance to come up and write a 9 on the board. While your colleagues are writing on the board, you will be writing on a practice sheet. Take your time and write some good 9's!

TEACHER DO: Hand out writing paper to students. Call students to the board 3, 4, or 5 at a time, depending on how much room you have and how long the lines are that you drew.

STUDENTS DO: Seated students write 9's on their papers. Selected students come to the board in groups and write the number using the grid lines you drew on the board.

TEACHER DO: Check the work of students at the board, offering help as needed. Erase their work, redraw the grid lines as needed, and call the next group of students to the board. Repeat until all students have had a turn at the board.

As seated students work, walk around and help them correct their grips and erase and fix errors. Remind frustrated students that they are just learning and will get better over time.

TEACHER SAY: When I call you (or your table/group/row), bring me your practice paper.

TEACHER DO: Call students up with their sheets. Write their names on the sheets and save the papers so you can track their progress over time.

STUDENTS DO: Return to their seats.

Note for the Teacher: Substitute the story problem with other numbers and a different story, if you prefer. Make sure the answer to the story problem is 10 or less.)

2. TEACHER SAY: You are such good problem solvers and I would love your help solving more problems. I love to count everywhere I go! This morning on my way to school, I saw 5 yellow cats. Then, I saw 5 black and white cats. But, I cannot figure out how many cats I saw all together. Can you help me figure that out?

STUDENTS DO: Confirm they can help.

TEACHER SAY: **I will need some volunteers. Raise your hand if you would like to come up and be one of the yellow cats.**

STUDENTS DO: Raise hands to volunteer. Selected students go to the front of the room to represent the 5 yellow cats.

TEACHER DO: Repeat process to get volunteers to represent 5 black and white cats. Place students in a group separate from the first group.

TEACHER SAY: **How can I figure out how many cats I saw all together? Give me a thumbs up if you have some ideas.**

STUDENTS DO: Give thumbs up to volunteer. Selected students share their suggestions.

TEACHER DO: If necessary, ask questions to guide students' thinking about how to solve the problem. For example, if I want to know how many cats I saw all together, is this a putting together problem or a taking away problem? If no students are able to suggest a solution, explain why it is a putting together problem.

TEACHER SAY: **If I want to know how many cats I saw all together, I need to put the cats together. So I can move my 5 yellow cats and my 5 black and white cats together.**

TEACHER DO: Move two student groups together.

TEACHER SAY: **Now what should I do? Raise your hand if you know.**

STUDENTS DO: Raise hands to respond. Selected students try to answer the question.

TEACHER SAY: **Once I put the groups together, I have to count to see how many I have all together. Help me count them.**

STUDENTS DO: Count the students aloud with the teacher.

TEACHER SAY: **I saw 10 cats! So 5 and 5 makes 10! Thank you for your help!**

Share (5 mins)

Directions

1. **TEACHER SAY:** **What have you learned about solving math story problems where we have to put two groups together to find the answer? Turn to your Shoulder Partner and share your ideas.**

STUDENTS DO: Talk to **Shoulder Partners** about what they have learned about "putting together" problems.

2. **TEACHER SAY:** **Now, I would like to hear from you. Give me a thumbs up if you want to share your thinking.**

STUDENTS DO: Give a thumbs up. Selected students share thinking.

TEACHER DO: Take note of students' ideas and who is demonstrating strong understanding of early addition concepts. Correct misconceptions and misunderstandings and think about how you can group or pair students for future instruction. Praise all students who volunteered.

Lesson 52 Overview

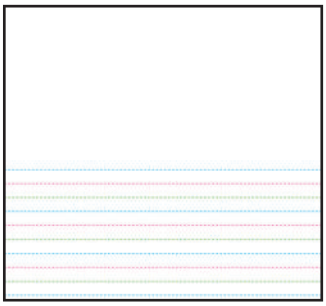
OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write number 10 • Act out a subtraction story problem • Explain how they solved a story problem	• Addition • Subtraction	• Draw three separate grid lines on the board as shown below. • Gather, create, or print out primary writing paper with grid lines as shown in the lesson Materials section. • If possible, write sample 10's and dotted line 10's on the paper on the first row of grid lines before making copies.

MATERIALS

Calendar Math Area



Primary Writing paper



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ (name of the student) is going to help us with our calendar math.

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: We are going to count and clap today. We will count from 1 to 10. We clap equal to the amount of the number we are counting. So, when we count 1, we will clap 1 time. When we count 2, we will clap 2 times, and so on all the way to 10. We will do it two times. Let's begin!

STUDENTS DO: Clap and count with the teacher two times.

TEACHER SAY: Great job counting today! It is time to practice writing our numbers

Learn (25-30 mins)

Directions

Note for the Teacher: During this activity it is important to help students learn proper pencil holding grip.

1. TEACHER DO: Write a 10 on the writing grid on the board. Leave your 10 on the board when you erase the students' work and redraw the lines.

TEACHER SAY: Look at the number I just wrote. It is a 10.

TEACHER DO: Tell students the lines help us make sure we write numbers correctly. Explain how the number touches the top and bottom grid lines. Write another 10, explaining how you are using the lines.

TEACHER SAY: I'm going to give each of you a chance to come up and write a 10 on the board. While your colleagues are writing on the board, you will be writing on a practice sheet. Take your time and write some good 10's!

TEACHER DO: Hand out writing paper to students. Call students to the board 3, 4, or 5 at a time, depending on how much room you have and how long the lines are that you drew.

STUDENTS DO: Seated students write 10's on their papers. Selected students come to the board in groups and write the number using the grid lines you drew on the board.

TEACHER DO: Check the work of students at the board, offering help as needed. Erase their work, redraw the grid lines as needed, and call the next group of students to the board. Repeat until all students have had a turn at the board.

As seated students work, walk around and help them correct their grips and erase and fix errors. Remind frustrated students that they are just learning and will get better over time.

TEACHER SAY: When I call you (or your table/group/row), bring me your practice paper.

TEACHER DO: Call students up with their sheets. Write their names on the sheets and save the papers so you can track their progress over time.

STUDENTS DO: Return to their seats.

2. TEACHER SAY: You did such a great job writing all of the numbers 1 through 10. Your hands are getting stronger and your numbers are getting better and better! We will keep practicing writing numbers together, but right now I really need your help.
I had 7 balloons. They were so beautiful! They were all different colors and they were so big. Then, 3 of them popped! I was so upset I forgot to figure out how many balloons I had left. Can you help me figure it out?

STUDENTS DO: Confirm they can help.

TEACHER SAY: What do you think we should do? Can we act it out? Raise your hands if you would like to help me.

STUDENTS DO: Raise hands to volunteer.

TEACHER SAY: **How many people should I call up? I will tell my story again and you think about it.**

TEACHER DO: Tell the story problem again.

TEACHER SAY: **Talk to your Shoulder Partner about how many people should come up to the front. Think about whether this is a putting together problem or a taking away problem.**

STUDENTS DO: Talk to their **Shoulder Partners**.

TEACHER SAY: **Is this a putting together problem or a taking away problem? How do you know?**

TEACHER DO: Call on students to answer the questions. Engage students in conversation, asking questions as needed to help them think about the problem.

TEACHER SAY: **I started with 7 balloons, so I need to start with 7 students.**

TEACHER DO: Call 7 volunteers to the front of the room.

STUDENTS DO: Selected students go to the front of the room.

TEACHER SAY: **I have my 7 balloons up here. Then what happened?**

STUDENTS DO: Respond: 3 popped.

TEACHER SAY: **So what do I need to do with my balloons up here? Am I putting together or taking away?**

STUDENTS DO: Respond: taking away.

TEACHER SAY: **Three of the balloons popped, so I do not have them anymore. They were taken away from my group. So let's take them away.**

TEACHER DO: Select 3 students to return to step away from the group and move to the side.

TEACHER SAY: **How do I figure out how many I have left?**

STUDENTS DO: Respond together: Count them.

TEACHER SAY: **If I want to know how many I have left, I have to count them. Help me count.**

STUDENTS DO: Count the 4 remaining students.

TEACHER SAY: **I had 7 balloons. 3 of them popped (point to "popped" group), so I have 4 left (point to remaining group). So I can say 7 take away 3 is 4. I have 4 balloons left. Thank you for helping me solve that problem!**

STUDENTS DO: Volunteers return to their seats.

Share (5 mins)

Directions

1. TEACHER SAY: Today you helped me solve a kind of math problem called a subtraction problem. When we subtract, we take away or take apart. How is that different from the other kinds of problems you helped me solve – addition problems? Turn and talk to your Shoulder Partner about what you are thinking.

STUDENTS DO: Turn and talk to their **Shoulder Partner**s.

TEACHER SAY: I really want to hear what you are thinking. How was today's story problem different from the cat problem, or the book problem, or the party invitation problem? Give me a thumbs up if you want to share your thinking. I might call on people who do not have thumbs up, so think about what you would like to share.

STUDENTS DO: Give thumbs up to volunteer. Selected students discuss the difference between the addition and subtraction problems they have solved.

TEACHER DO: Listen to students' responses. Take note of students who have early understanding of addition and subtraction concepts. Correct misconceptions and misunderstandings. Consider how you might group or pair students in future lessons to support those students who need additional help.

Lesson 53 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count from 1 to 10
- Write numbers 1 and 2
- Compare and classify objects by length
- Collaborate with colleagues to collect data

STUDENT VOCABULARY:

- Compare
- Data
- Length
- Longer
- Recording sheet
- Shorter

LESSON PREPARATION FOR THE TEACHER

- Gather, create, or print out primary writing paper with grid lines as shown in the Lesson Materials section.
- If possible, write sample 1's and 2's and dotted line 1's and 2's on the paper before making copies.
- Cut one piece of yarn or string for each student. The pieces should be of equal length. Suggested length: 50 cm (choose a different length if you prefer).
- Create or print out Length Exploration data recording sheets as shown below. You will need one for each trio of students.

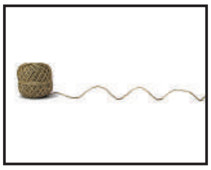
Shorter	Longer

MATERIALS

Calendar Math Area



Yarn or string, cut into equal lengths (one piece for each student) (See Lesson Preparation for the Teacher for instructions and an example.)

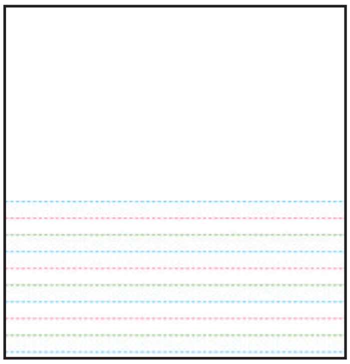


Length Exploration data recording sheet (one for each trio of students) (See Lesson Preparation for the Teacher for instructions and an example.)

Sheet of chart paper (or other large paper or space on the chalkboard) to display student data



Primary Writing paper



Calendar and Movement (15 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ (name of the student) is going to help us with our calendar math.

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: We are going to do jumping jacks as we count from 1 to 10 today. Stand and make sure you have plenty of room to move. (Substitute another movement if students will not have room to safely do jumping jacks.)

STUDENTS DO: Stand and make sure they have room to move. Count to 10 as they do jumping jacks.

TEACHER DO: Repeat counting and movement activity two times.

TEACHER SAY: Great job counting today! It is time to practice writing our numbers.

Learn (35 mins)

Directions

1. TEACHER DO: Hand out primary writing paper to students. Briefly review how to write a 1 and a 2.

TEACHER SAY: On your practice paper today, write three 1's and three 2's. Remember that your numbers should touch the top and bottom lines on your paper. You have about 5 minutes. If you finish before your colleagues, practice writing some extra 1's and 2's.

STUDENTS DO: Write three 1's and three 2's on their practice papers.

TEACHER DO: Walk around and help students with their pencil grips and writing practice. Collect all papers and write students' names on them. Use them to evaluate students' progress (compared to their initial practice papers) and to identify students who need additional instruction.

Note for the Teacher: The activity described below takes place in the classroom, but can be done anywhere in the school or outside, if conditions allow. If you have a small class size, consider pairing students. If you have a large class, consider having students work in groups of 4, but ensure that they are taking turns and that everyone is participating.

2. TEACHER SAY: Today we are going to compare lengths of objects. Who remembers what length means? Give a thumbs up if you remember.

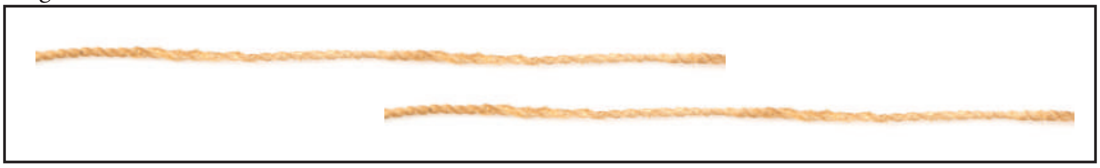
STUDENTS DO: Give a thumbs up if they remember the meaning of length. Selected students may answer that length is related to long and short and it is something that can be measured.

TEACHER SAY: When we talk about length, we talk about measuring or comparing how long or short something is. Today, you are going to compare objects to see which ones are longer or shorter than a piece of yarn I give you. But I have some questions for you first.

3. TEACHER DO: Draw a line on the board longer than the yarn pieces you cut. Make it long enough that students will be able to see that it is longer. Hold up one piece of yarn.

TEACHER SAY: I want to compare this piece of yarn with the line I just drew on the chalk-board. Do I put the yarn here? Tell me, everyone.

TEACHER DO: Hold the yarn up to the middle of the line on the board so the yarn appears to be longer than the line on the board.



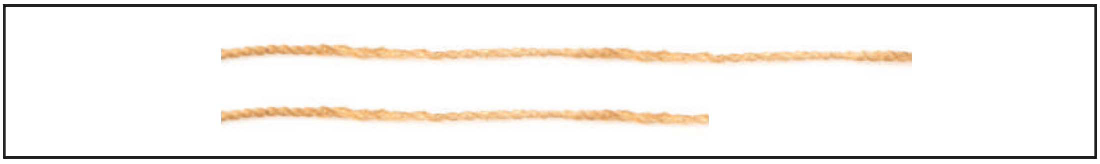
STUDENTS DO: Respond together. Expected answer: No.

TEACHER SAY: Where should I put it? Raise your hand if you can tell me and explain why.

STUDENTS DO: Raise hands to answer. Selected students should note that the yarn has to be lined up with one end of the line on the board and that otherwise it is not a fair comparison. Students may not know the word "accurate," but their explanations may touch on the concept.

TEACHER SAY: When we compare lengths, we need to make sure the two objects are lined up at one end. It does not really matter which end. You just have to make sure they are lined up at one end like this.

TEACHER DO: Move the yarn so it is lined up with the line on the chalkboard.



TEACHER SAY: Give a thumbs up if you think the yarn is longer. Give a thumbs down if you think the line on the chalkboard is longer.

STUDENTS DO: Give thumbs up or thumbs down.

TEACHER SAY: The line on the chalkboard is longer, so if you gave a thumbs down you are correct! Give yourselves a pat on the back!

STUDENTS DO: Pat their backs.

4. TEACHER DO: Before you hand out materials, go over the directions for the activity.

TEACHER SAY: You are going to work with two partners today to compare lengths. You and your partners will receive a piece of yarn (hold up yarn) and a data recording sheet (hold up recording sheet). Remember that data means information.

Your data recording sheet says Shorter and Longer. The side that says Shorter has a picture of a short line. The side that says Longer has a picture of a long line. That will help you remember what the words say.

Your challenge today is to go around the room and compare the length of your yarn to things around the room. Find things that are longer than your yarn and shorter than your yarn. When you find something longer than your yarn, draw a picture of it on the Longer side of your data recording sheet. When you find something shorter than your yarn, draw a picture of it on the Shorter side of your data recording sheet.

Take turns with your partners so each of you gets a chance to measure and draw. Do you have any questions? You will have about 15 minutes to work (depending on how much time is left in math class).

STUDENTS DO: Raise hands to ask questions.

TEACHER DO: Answer students' questions, if any. Group students into threes, hand out data recording sheets and pieces of yarn, and let them get started.

STUDENTS DO: Walk around the room and compare the length of their yarn with objects they find. Draw their findings on the recording sheet.

TEACHER DO: Walk around and monitor students' work. Offer help and answer questions, as needed. When time is up, regroup students for Share.

Share (10 mins)

Directions

1. TEACHER DO: If possible (and if it is not already part of your routine), gather students together to sit on the floor. Have them bring their data recording sheets and yarn and sit with their team.

STUDENTS DO: Bring recording sheets and yarn to Share and sit with their team.

TEACHER DO: Ask each team to talk about one shorter object and one longer object they found. Collect all recording sheets.

TEACHER SAY: You did a wonderful job collecting data about shorter and longer objects. Remember that data means information. I am going to cut all of your data sheets in half and create a large class data sheet. All of your Shorter drawings will be on one side and all of your Longer drawings will be on the other side. We will take a look at all of the data tomorrow. Amazing work today! Give your teammates a high five!

STUDENTS DO: Give teammates a high five.

TEACHER SAY: Now, I am giving each of you a piece of string. Take it home tonight and find one thing that is shorter than your string and one thing that is longer than your string. Draw a picture of each thing and bring it to school with you tomorrow. Do you have any questions.

STUDENTS DO: Ask questions to make sure they understand the directions.

TEACHER DO: Hand out pieces of yarn to students.

Lesson 54 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count from 1 to 10
- Write numbers 3 and 4
- Compare and classify objects by length
- Collaborate with colleagues to collect data

STUDENT VOCABULARY:

- Compare
- Data
- Left
- Length
- Longer
- Recording sheet
- Right
- Shorter

LESSON PREPARATION FOR THE TEACHER

- Gather, create, or print out primary writing paper with grid lines as shown in the Lesson Materials section.
- If possible, write sample 3's and 4's and dotted line 3's and 4's on the paper before making copies.
- Create a large data recording sheet using chart paper or other large paper (or on a bulletin board or the chalkboard). Add headings Shorter and Longer and divide the recording sheet down the middle to look like students' data recording sheets.
- Cut students' data sheets in half. Cut off the headings on the Shorter sheets and tape or glue them to the Shorter side of your large data recording sheet. Cut off the headings on the Longer sheets and tape or glue them to the Longer side of your large data recording sheet.
- Gather tools for students to use as non-standard length measuring tools. Each team of students will need 3 of the same thing. Although teams must have 3 of the same item, different teams can have different items. For example, Team 1 might have 3 markers, while Team 2 might have 3 new crayons). Examples of measuring tools: Markers, new crayons, straws, wooden craft/popsicle sticks, chenille stems.
- Create or print out Measurement Fun data recording sheets for students as shown below.

Measurement Fun!	
Tool:	Object
1	
2	
3	

MATERIALS

Calendar Math Area

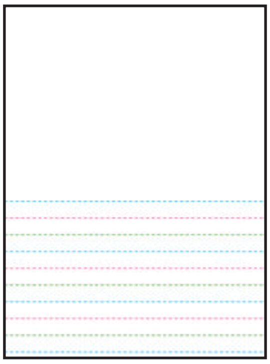


Student data, displayed on large class data recording sheet

Length measuring tools, all the same length (markers, new crayons, straws, chenille stems, wooden craft/popsicle sticks) (See Lesson Preparation for the Teacher for instructions and examples.)

Measurement Fun data recording sheet (one for each trio of students) (See Lesson Preparation for the Teacher for instructions and an example.)

Primary Writing paper



Calendar and Movement (15 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **_______ (name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, _______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: **Today we are going to practice counting and clapping from right to left. We will stand up and clap and count after I show you how this movement works.**

TEACHER DO: Model clapping right to left while counting to 10. Repeat three times.

TEACHER SAY: **Everyone stand and clap and count with me. We will count to 10 three times.**

STUDENTS DO: Clap and count aloud with the teacher three times.

TEACHER SAY: **Great job!**

Learn (35 mins)

Directions

1. TEACHER DO: Hand out primary writing paper to students. Briefly review how to write a 3 and a 4.

TEACHER SAY: **On your practice paper today, write three 3's and three 4's. Remember that your numbers should touch the top and bottom lines on your paper. You have about 5 minutes. If you finish before your colleagues, practice writing some extra 3's and 4's.**

STUDENTS DO: Write three 3's and three 4's on their practice papers.

TEACHER DO: Walk around and help students with their pencil grips and writing practice. Collect all papers and write students' names on them. Use them to evaluate students' progress (compared to their initial practice papers) and to identify students who need additional instruction.

TEACHER SAY: **Great job! Remember, we are still just learning and our writing will get better as we continue to practice.**

2. TEACHER DO: Display the large data recording sheet with students' data taped/glued to it.

TEACHER SAY: **I used your data recording sheets to create a class data recording sheet. All of your drawings are on it! Look how many things you found that are shorter and longer than your piece of yarn. I would like to hear about the objects you found in your home or outside after school yesterday. Raise your hand if you have data to share.**

STUDENTS DO: Raise hands to talk about the objects they compared to their yarn after school.

TEACHER DO: If possible, either add the students' drawings to the class data recording sheet after the students share or draw it yourself.

TEACHER SAY: **We classified these items by length. Now, I would like to know how many we have on each side. Watch and listen as I count the items on each side.**

TEACHER DO: Count the number of items on the Shorter side and record the total on the data recording sheet. Repeat for the Longer side.

STUDENTS DO: Observe as the teacher counts aloud.

TEACHER SAY: **Wow! You found ______ items that were shorter than your yarn and ______ items that were longer than your yarn! Wonderful!**

Note for the Teacher: The activity described below takes place in the classroom, but can be done anywhere in the school or outside, if conditions allow. If you have a small class size, consider pairing students. If you have a large class, consider having students work in groups of 4, but ensure that they are taking turns and that everyone is participating.

3. Today we are going to take a look at length in a different way. You will work in teams of 3 again. Each team will receive 3 of the same measuring tool. I am going to hand out your data recording sheets because they will help you understand the directions for today's challenge.

TEACHER DO: Group students into teams of 3 and give each team a data recording sheet.

Note for the Teacher: If all students are using the same measurement tool, adjust the directions below accordingly.

TEACHER DO: Point to the title.

TEACHER SAY: The title of your data recording sheet is Measurement Fun. You say it.

STUDENTS DO: Say together: Measurement Fun.

TEACHER DO: Point to the word Tools.

TEACHER SAY: This word says Tools. You say it.

STUDENTS DO: Say together: Tools.

TEACHER SAY: I'm going to hand out your measuring tools. Once you get your tools, draw a picture of one of them here. For example, if you are measuring with markers, draw a picture of a marker here.

TEACHER DO: Hand out measuring tools to each group. Allow time for students to quickly draw a picture of it.

STUDENTS DO: Draw a picture of their measuring tools on their data recording sheets.

TEACHER DO: Point to the word Objects.

TEACHER SAY: This word says Objects. You say it.

STUDENTS DO: Say together: Objects.

4. TEACHER SAY: Good! Your first challenge is to find an object that is the same length as 1 of your measuring tools. Once you find it, draw a picture of it in the box across from the number 1. You have about 5 minutes.

STUDENTS DO: Work together to find an object the same length as 1 of their measuring tools. Draw a picture of it in the box across from 1.

TEACHER DO: After about 5 minutes, get students' attention and give the next challenge.

TEACHER SAY: Your next challenge is to find an object that is the same length as 2 of your measuring tools. Once you find it, draw a picture of it in the box across from the number 2. Remember to line up one end of your tool with one end of the object. You also have to make sure your two measuring tools are touching. If they are not touching, your measurement will not be correct.

TEACHER DO: Model so all students can see.

TEACHER SAY: Make sure a different team member draws the picture this time and that each of you has a chance to measure. Work together! You have about 5 minutes.

STUDENTS DO: Work together to find an object the same length as 2 of their measuring tools. Draw a picture of it in the box across from 2.

TEACHER DO: After about 5 minutes, get students' attention and give the final challenge.

TEACHER SAY: Your next challenge is to find an object that is the same length as 3 of your measuring tools. Once you find it, draw a picture of it in the box across from the number 3. Remember to line up one end of your tool with one end of the object. You also have to make sure your three measuring tools are touching as you line them up or your measurements will not be correct.

TEACHER DO: Model so all students can see.

TEACHER SAY: **Make sure a different team member draws the picture this time and that each of you have a chance to measure. Work together! You have about 5 minutes.**

STUDENTS DO: **Work together to find an object the same length as 3 of their measuring tools. Draw a picture of it in the box across from 3.**

TEACHER DO: **After about 5 minutes, get students' attention and have them bring their measuring tools to you, then return to their seats.**

STUDENTS DO: **Take measuring tools to the teacher, then return to their seats.**

TEACHER DO: **Bring one of each kind of measuring tool (if student teams used different tools) to Share.**

Share (10 mins)

Directions

1. TEACHER DO: If possible (and if it is not already part of your routine), gather students together to sit on the floor. Have them bring their data recording sheets and sit with their team.

STUDENTS DO: Bring recording sheets to Share and sit with their team.

TEACHER DO: Ask each team to present their data recording sheets. Show the measuring tools they used (if teams used different tools).

TEACHER SAY: **You did an amazing job measuring with your team today! You did a great job finding objects that were the same length as 1, 2, and 3 of your measuring tool. I think we should display these so other people around the school can see them. Give your teammates a high five!**

STUDENTS DO: Give teammates a high five.

TEACHER SAY: **When you go home today, see if you can practice measuring with an object in your house.**

Lesson 55 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count from 1 to 10
- Write numbers 5 and 6
- Compare and classify objects by weight
- Collaborate with colleagues to collect data

STUDENT VOCABULARY:

- Compare
- Data
- Heavier
- Lighter
- Recording sheet
- Weight

LESSON PREPARATION FOR THE TEACHER

- Gather, create, or print out primary writing paper with grid lines as shown in the Lesson Materials section.
- If possible, write sample 5's and 6's and dotted line 5's and 6's on the paper before making copies.
- Create or print out Weight Exploration recording sheets as shown below. You will need one for each trio of students.
- Common object for weight measurement, such as a full water bottle. You will need one object for each trio of students. Each group must have the same object. This lesson will refer to a water bottle. If you use a different item, substitute all water bottle references for your item.
- Have a sheet of chart paper (or other large paper or space on the chalkboard) to display student data

Heavier	Lighter
	

MATERIALS

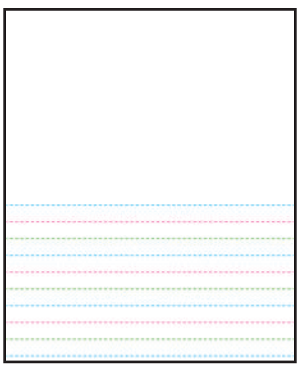
Calendar Math Area



Weight comparison object, such as a full water bottle (one for each trio of students) (See Lesson Preparation for the Teacher for instructions and an example.)

Weight Exploration recording sheet (one for each trio of students) (See Lesson Preparation for the Teacher for instructions and an example.)

Primary Writing paper



Calendar and Movement (15 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ (name of the student) is going to help us with our calendar math.

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: Everyone squat down on the floor like a frog. We are going to count from 1 to 10. When we get to 10, jump up like a frog and shout 10! Let's begin.

STUDENTS DO: Squat, count, and jump with the teacher.

TEACHER DO: Repeat 1-2 times.

TEACHER SAY: Great job!

Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out primary writing paper to students. Briefly review how to write a 5 and a 6.

TEACHER SAY: On your practice paper today, write three 5's and three 6's. Remember that your numbers should touch the top and bottom lines on your paper. You have about 5 minutes. If you finish before your colleagues, practice writing some extra 5's and 6's.

STUDENTS DO: Write three 5's and three 6's on their practice papers.

TEACHER DO: Walk around and help students with their pencil grips and writing practice. Collect all papers and write students' names on them. Use them to evaluate students' progress (compared to their initial practice papers) and to identify students who need additional instruction.

Note for the Teacher: The activity described below takes place in the classroom, but can be done anywhere in the school or outside, if conditions allow. If you have a small class size, consider pairing students. If you have a large class, consider having students work in groups of 4, but ensure that they are taking turns and that everyone is participating.

2. TEACHER SAY: You did a great job measuring length. Today, we are going to explore weight. Weight means how heavy or light something is. Can you tell me an animal that is heavy?

STUDENTS DO: Call out animals that are heavy. Students might answer elephants, camels, hippos, rhinos, or other large, heavy animals.

TEACHER SAY: **Can you tell me an animal that is light?**

STUDENTS DO: Call out animals that are light. Students might answer birds, butterflies, frogs, fennec fox, or other small, light animals.

3. TEACHER SAY: **We will not weigh anything as heavy as an elephant today, but we will be comparing weights together. When we compare weights, we see which object is heavier and which object is lighter. What are some ways to tell if something is heavier or lighter?**

STUDENTS DO: Raise hands to volunteer. Selected students offer suggestions. Possible answers include picking up the objects to feel the difference, using a scale.

TEACHER DO: Before handing out materials, go over the directions with students.

TEACHER SAY: **You are going to work with two partners today to compare weights. You and your partners will receive a full water bottle (hold up water bottle) and a data recording sheet (hold up recording sheet). Remember that data means information.**

Your data recording sheet says Heavier and Lighter. The side that says Heavier has a picture of an elephant. The side that says Lighter has a picture of a bird. That will help you remember what the words say.

Your challenge today is to go around the room and compare the weight of your water bottle to things around the room. Find things that are heavier than your water bottle and lighter than your water bottle. When you find something heavier than your water bottle, draw a picture of it on the Heavier side of your data recording sheet. When you find something lighter than your water bottle, draw a picture of it on the Lighter side of your data recording sheet.

Do you have any questions?

STUDENTS DO: Raise hands to ask questions.

TEACHER DO: Answer students' questions, if any.

4. TEACHER SAY: **I have a question. What if we want to compare something big and really heavy, like a desk. Should we pick that up?**

STUDENTS DO: Call out: No.

TEACHER SAY: **Why not?**

STUDENTS DO: Call out: It is too heavy.

TEACHER SAY: **Some things are too heavy to pick up. But we know if they are too heavy to pick up, they are definitely heavier than our water bottle!**

5. TEACHER DO: Group students into threes, hand out data recording sheets and full water bottles, and let them get started.

TEACHER SAY: **Take turns with your partners so each of you gets a chance to compare and draw. You will have about 15 minutes to work (depending on how much time is left in math class).**

STUDENTS DO: Walk around the room and compare the weight of their water bottle with objects they find. Draw their findings on the recording sheet.

TEACHER DO: Walk around and monitor students' work. Offer help and answer questions, as needed. When time is up, regroup students for Share.

Share (5 mins)

Directions

1. TEACHER DO: If possible (and if it is not already part of your routine), gather students together to sit on the floor. Have them bring their data recording sheets and water bottles and sit with their team.

STUDENTS DO: Bring recording sheets and water bottles to Share and sit with their team.

TEACHER DO: Ask each team to talk about one heavier object and one lighter object they found. Collect all recording sheets.

TEACHER SAY: **You did a wonderful job collecting data about heavier and lighter objects. Did any of your comparisons surprise you?**

STUDENTS DO: Share surprising findings, if any.

TEACHER SAY: **Sometimes just because something is big does not mean it is heavy! And just because something is small does not mean it is light.**
I am going to do the same things to your weight data recording sheets that I did with your length data sheets to create one big class data recording sheet. We will take a look at all of the data tomorrow. Amazing work today! Give your teammates a high five!

STUDENTS DO: **Give teammates a high five.**

Lesson 56 Overview

OUTCOMES
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write numbers 7 and 8 • Find objects of equal weight using a balance • Collaborate with colleagues to collect data

STUDENT VOCABULARY:
• Balance • Compare • Data • Heavier • Lighter • Recording sheet • Weight

LESSON PREPARATION FOR THE TEACHER
• Gather, create, or print out primary writing paper with grid lines as shown in the Lesson Materials section. • If possible, write sample 7's and 8's and dotted line 7's and 8's on the paper before making copies. • Create a large data recording sheet using chart paper or other large paper (or on a bulletin board or the chalkboard). Add headings Heavier and Lighter and divide the recording sheet down the middle to look like students' data recording sheets. • Cut students' data sheets in half. Cut off the headings on the Heavier sheets and tape or glue them to the Heavier side of your large data recording sheet. Cut off the headings on the Lighter sheets and tape or glue them to the Lighter side of your large data recording sheet. • Gather cups or bags of small items to weigh, such as beans, small stones, dry pasta, coins, buttons, math counters, and dry rice. • Gather a hanger (preferably with notches in the top bars), yarn or string, small empty plastic containers, such as fruit or yogurt cups, and a hole punch. Create a hanger balance as shown below. Consider making a few to keep with your math games and activities.



MATERIALS

Calendar Math Area



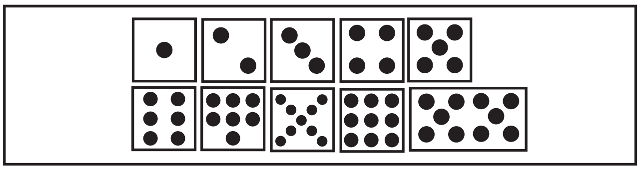
Students' weight comparison data from previous day, displayed on large class data recording sheet

Hanger balance (See Lesson Preparation for the Teacher for instructions and an example.)

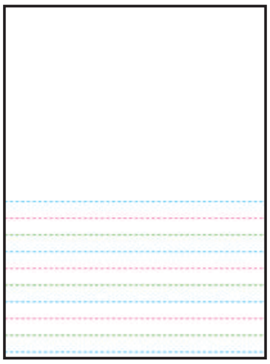


Cups or bags of different items to weigh (See Lesson Preparation for the Teacher for instructions and an example.)

Student Dot Card sets



Primary Writing paper



Calendar and Movement (15 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ (name of the student) is going to help us with our calendar math.

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: Today we are going to practice counting by marching. We will stand up and march and count to 10 two times. Let's begin.

STUDENTS DO: March and count to 10 two times.

TEACHER SAY: Great job!

Learn (40 mins)

Directions

1. TEACHER DO: Hand out primary writing paper to students. Briefly review how to write a 7 and a 8.

TEACHER SAY: On your practice paper today, write three 7's and three 8's. Remember that your numbers should touch the top and bottom lines on your paper. You have about 5 minutes. If you finish before your colleagues, practice writing some extra 7's and 8's.

STUDENTS DO: Write three 7's and three 8's on their practice papers.

TEACHER DO: Walk around and help students with their pencil grips and writing practice. Collect all papers and write students' names on them. Use them to evaluate students' progress (compared to their initial practice papers) and to identify students who need additional instruction.

TEACHER SAY: Great job! Remember, we are still just learning and our writing will get better as we continue to practice.

2. TEACHER DO: Display the large data recording sheet with students' data taped/glued to it.

TEACHER SAY: I used your data recording sheets to create a class data recording sheet. All of your drawings are on it! Look how many things you found that were heavier and lighter than your water bottle. We classified these items by weight. Now, I would like to know how many we have on each side. Watch and listen as I count the items on each side.

TEACHER DO: Count the number of items on the Heavier side and record the total on the data recording sheet. Repeat for the Lighter side.

STUDENTS DO: Observe as the teacher counts aloud.

TEACHER SAY: Wow! You found ______ items that were heavier than your water bottle and ______ items that were lighter than your water bottle! Wonderful!

3. TEACHER DO: Show hanger balance to students.

TEACHER SAY: Does anyone know what this is? I will give you a hint. It has to do with weight.

STUDENTS DO: Raise hands to volunteer. Selected students will share their ideas.

TEACHER SAY: This is called a balance. We can use it to find out what things weigh the same amount. We are going to explore that today. You will work with the same team as yesterday.

TEACHER DO: Point to cups/bags of measuring materials.

TEACHER SAY: There are different kinds of materials here for you and your teammates to measure. When you come up with your team, you will put one kind of material in one cup on the balance. Be careful so the cup does not tip over. Then you will pick one of the other materials to put in the other cup. Your goal is to get the two cups to balance. What do you think I mean by balance? Show me with your hands what the cups will look like if they balance.

STUDENTS DO: Hold up two hands at the same level.

TEACHER DO: If necessary, show students what the cups will look like when they balance.

TEACHER SAY: What does it mean if the two cups balance? What does that tell us about their weights?

STUDENTS DO: Raise hands to volunteer. Selected students try to answer the questions.

TEACHER SAY: If the cups balance, it means the items in the cups have the same weight. So, today we are trying to make the cups have an equal weight. Show me your balanced hands again.

STUDENTS DO: Hold hands up at the same level.

TEACHER SAY: I will call each team up to work with me to use the balance. While I am working with a team, the rest of you will be doing dot card practice. You can flash cards to each other and figure out how many dots are on the card, you can clap the number of dots on the card, or you can compare the cards to tell which is greater than and which is less than.

TEACHER DO: Hand out students' sets of dot cards. Prepare hanger balance by hanging it somewhere the cups can hang freely.

STUDENTS DO: Work with a partner to practice using dot cards. Go to the teacher when their team is called.

Note for the Teacher: It is not important for students to finish the activity. They will likely get very close to balancing the cups. The process of trial and error is most important, so they should work with minimal guidance. Once all students know how to use the balance, keep it available in the classroom for them to explore during free time.

TEACHER DO: Call student teams up one at a time. If you made more than one balance, consider calling up two groups at a time. Give students 3-4 minutes to complete the activity (depending on how many students and groups you have).

After 3-4 minutes, have the team pour the items back in their cups/bags and return to their seats for dot card practices. Call the next team up. Repeat until all teams have had a turn. If it is not possible to finish in one class period, continue the activity in the next period.

Share (5 mins)

Directions

1. **TEACHER SAY: When might we need to know if something is heavier, lighter, or the same weight? Turn to your Shoulder Partner and talk about it.**

STUDENTS DO: Talk to their **Shoulder Partners** about why weighing things or comparing weights is important.

TEACHER DO: Call on students to share their ideas. Take note of students who are demonstrating strong understanding and those who may need additional support. Praise all students who shared their thinking.

Lesson 57 Overview

OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write numbers 9 and 10 • Demonstrate understanding of the relationship between number and quantity	• Journal	• Gather, create, or print out primary writing paper with grid lines as shown in the Lesson Materials section. • If possible, write sample 9's and 10's and dotted line 9's and 10's on the paper before making copies. • Students will need their math journals for the next few lessons. Since students have been working on writing and drawing independently, they will start to use their math journals more often.

MATERIALS

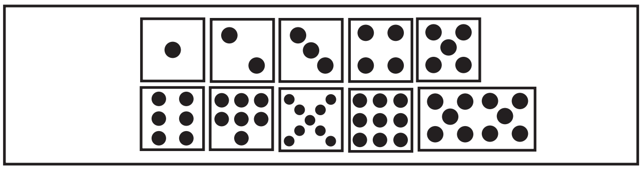
Calendar Math Area



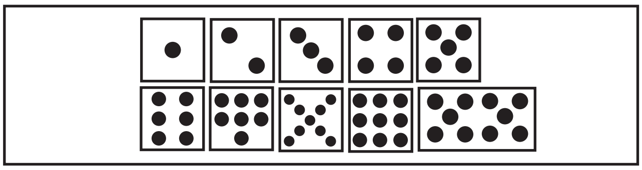
Student Math Journals and pencils



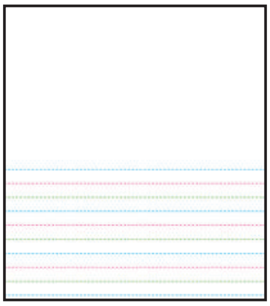
Student Dot Card sets



Large Dot Cards (Teacher set)



Primary Writing paper



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ (name of the student) is going to help us with our calendar math.

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's do one of my favorites. Let's go back to the zoo! I am going to give you a direction and a number of times to do it. Listen carefully!

- **Stand on 1 leg like a flamingo.**
- **Pretend you are a kangaroo and roar 2 times.**
- **Pretend you are a lion. Jump 3 times.**
- **Pretend you are a turtle. Stick your head out of your shell 4 times.**
- **Pretend you are a crocodile. Use your arms to chomp down 5 times.**
- **Reach up and pull 6 monkeys out of the trees.**
- **Pretend you are a giraffe and eat 7 leaves overhead.**
- **Pretend you are an elephant and stomp 8 times.**
- **Pretend you are an eagle and flap your giant wings 9 times.**
- **Pretend you are a gorilla and beat your chest 10 times.**

STUDENTS DO: Follow each direction, doing each movement the correct number of times

TEACHER SAY: Very good imaginations! Give your brain a high five.

TEACHER DO: Pat head.

STUDENTS DO: Pat their head.

Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out primary writing paper to students. Briefly review how to write a 9 and a 10.

TEACHER SAY: On your practice paper today, write three 9's and three 10's. Remember that your numbers should touch the top and bottom lines on your paper. You have about 5 minutes. If you finish before your colleagues, practice writing some extra 9's and 10's.

STUDENTS DO: Write three 9's and three 10's on their practice papers.

TEACHER DO: Walk around and help students with their pencil grips and writing practice. Collect

all papers and write students' names on them. Use them to evaluate students' progress (compared to their initial practice papers) and to identify students who need additional instruction.

TEACHER SAY: **Great job! Remember, we are still just learning and our writing will get better as we continue to practice.**

2. TEACHER DO: Hand out students' dot card sets and math journals. Have students open their math journals to the next clean page. Take out your large dot card set. Write numbers 1 through 10 on the board for students who may need extra support.

TEACHER SAY: **Let's play a game. I am going to show you a dot card for about 3 seconds. You write in your journal how many dots you think are on the card. So if I show you a card with 4 dots on it, you would write the number 4 in your journals. Do you have any questions?**

STUDENTS DO: Raise hands to ask questions.

TEACHER DO: Answer students' questions and make sure they understand the directions.

TEACHER SAY: **Get your pencil ready. Let's begin.**

TEACHER DO: Show a dot card for about 3 seconds.

STUDENTS DO: Write down the number of dots they saw.

TEACHER SAY: **On the count of 3, everyone hold up their journals and show me your answers. 1, 2, 3!**

STUDENTS DO: Hold up their journals to show their answers.

TEACHER SAY: **Good! If you wrote down _____ (number on dot card), you are correct! Let's try another one.**

TEACHER DO: Repeat procedure for two more dot cards.

STUDENTS DO: Record and check their answers.

3. TEACHER SAY: **Now you are going to play with your Shoulder Partners. Take turns showing each other cards and recording answers. You have about 10 minutes to play.**

STUDENTS DO: Play the dot card game with their partners.

TEACHER DO: Walk around and monitor students' work. At the end of the lesson, collect students' dot card sets.

Share (5 mins)

Directions

1. TEACHER DO: Have students **Turn and Talk** to their **Shoulder Partner** about what they have learned this week in math.

STUDENTS DO: Discuss what they learned today with their partners.

TEACHER SAY: **Now share with your colleagues and me something you have learned this week.**

TEACHER DO: Use **Calling Sticks** to select students to share.

STUDENTS DO: Selected students share learning.

Lesson 58 Overview

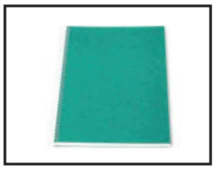
OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write numbers 1-5 • Draw pictures to solve a subtraction story problem • Differentiate between addition and subtraction problems	• Addition • Journal • Subtraction	• No new preparation needed.

MATERIALS

Calendar Math Area



Student Math Journals and pencils



Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **_______ (name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, _______ (name of student)."?**

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: **We are going to hop and count today. We will count 1, 2 and hop on one foot, then count 3, 4 and hop on our other foot, then count 5, 6 and hop on our first foot, then switch to the other foot, and keep going up to 10. Remember we say the number and hop at the same time. Stand and hop and count with me.**

STUDENTS DO: Stand, hop, and count with the teacher.

TEACHER SAY: **Nice work!**

Learn (25-30 mins)

Directions

TEACHER DO: Hand out math journals and have students open them to the next blank page. Write the numbers 1, 2, 3, 4, and 5 on the board.

TEACHER SAY: Hold up your math journals and show me your clean page.

STUDENTS DO: Hold up math journals to show a clean page.

TEACHER SAY: Write numbers 1, 2, 3, 4, and 5 in your math journal. Try to write the best numbers you have ever written! Next to your 1, draw 1 small circle. Next to your 2, draw 2 small circles. How many circles do you think you should draw next to your 3?

STUDENTS DO: Call out: 3.

TEACHER SAY: You should draw 3 small circles next to your 3. Draw small circles for 4 and 5, too. If you need help, raise your hand and I will come help you.

STUDENTS DO: Write numbers 1, 2, 3, 4, and 5 in their math journals. Draw small circles to represent the matching quantities.

TEACHER DO: Walk around to monitor students' progress. When most students are done, give the remaining students a time limit to finish.

• **TEACHER SAY: I would like your help solving a math problem. You can use your journals, so turn to the next blank page.**

STUDENTS DO: Turn to the next clean page.

TEACHER SAY: I made 6 sandwiches for my lunch this week and I put them in the refrigerator. Then, somebody ate 4 of them! I could not believe it! Can you help me figure out how many sandwiches I have left?

STUDENTS DO: Confirm they can help.

What kind of problem do you think this is? Is it a putting together problem or a taking away problem? How do you know? Turn to your **Shoulder Partner** and talk about it. Tell them what kind of problem you think it is and why you think so. If you are not sure, maybe your partner knows.

STUDENTS DO: Turn and talk to **Shoulder Partner**s.

TEACHER DO: Use **Calling Sticks** to select volunteers to share their thinking.

STUDENTS DO: Discuss whether or not it is a putting together problem or a taking away problem and explain how they know.

TEACHER SAY: I had sandwiches taken away from me so this is definitely a taking away problem! How many sandwiches did I start with?

STUDENTS DO: Call out, if they remember: 6.

TEACHER SAY: Let's draw 6 sandwiches in our journals. Draw any shape you like to represent sandwiches.

STUDENTS DO: Decide what shape to draw and draw 6 sandwiches in their journals.

TEACHER SAY: How many sandwiches were taken?

STUDENTS DO: Call out, if they remember: 4.

TEACHER SAY: How can we show that the sandwiches were taken, that I do not have them anymore?

STUDENTS DO: Make suggestions, such as erase them, cross them out, color them in.

TEACHER SAY: In your journals, how that those 4 sandwiches were taken away. Raise your hand when you think you have the answer. No calling out!

STUDENTS DO: Show in their journals that the 4 sandwiches were taken away.

TEACHER SAY: Tell me all at once how many sandwiches I have left.

STUDENTS DO: Respond together: 2.

TEACHER SAY: Thank you so much for helping me solve that problem! You are doing a great job learning how to solve addition and subtraction problems. Remember, the putting together problems are called addition problems and the taking away problems are called subtraction problems.

Lesson 59 Overview

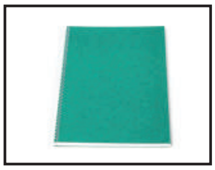
OUTCOMES	STUDENT VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write numbers 6-10 • Differentiate between addition and subtraction problems • Draw pictures or use objects to solve a story problem	• Addition • Journal • Subtraction • Strategy	• Gather sets of 10 objects for students to use as counters (one set per pair of students). Examples: beans, dry pasta, stones, buttons, math counters, blocks, connecting cubes.

MATERIALS

Calendar Math Area



Student Math Journals and pencils



Bags or cups of 10 counting objects (one set per pair of students) (See Lesson Preparation for the Teacher for instructions and examples.)

Calendar and Movement (15-20 mins)

Directions

1. TEACHER DO: Use **Calling Sticks** to select a student to be Calendar Helper.

STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: ______ **(name of the student) is going to help us with our calendar math.**

TEACHER DO: Let the student help walk the class through the routine. They should do the following and ask their colleagues to repeat:

- Say the current month
- Say the current day of the week
- Say all of the days of the week in order
- Point to the date on the calendar
- Say today's date in a sentence: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's thank our calendar helper today as they sit down. Can you all say, "Thank you, ______ (name of student)."?

STUDENTS DO: Thank the calendar helper.

2. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's do Movement Math! Today we will visit a friend again. Stand up and make sure you have room.

STUDENTS DO: Stand up.

TEACHER DO: Be sure to provide enough time for all students to complete each direction before moving on to the next one.

TEACHER SAY: **Make sure you count as you do each movement!**

- **Spin around 1 time.**
- **Pretend you are your friend's door and knock 2 times.**
- **They answered the door. Say hello 3 times.**
- **Your friend gives you hot tea. Hold it in your hand and blow on it 4 times.**
- **Now take 5 big sips. Then you can set the cup down.**
- **Your friend gave you a big cookie! Take 6 bites!**
- **Tell your friend "thank you" 7 times.**
- **Wipe your mouth 8 times.**
- **Let's play together! Bounce a ball 9 times.**
- **Time to go home! Wave goodbye 10 times.**

STUDENTS DO: **Follow each direction, doing each movement the correct number of times and counting aloud.**

TEACHER SAY: **Wonderful! Give your neighbor a high five and have a seat.**

TEACHER DO: **Pat head.**

STUDENTS DO: **Pat their heads and sit.**

Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals and have students open them to the next blank page. Write the numbers 6, 7, 8, 9, and 10 on the board.

TEACHER SAY: **Hold up your math journals and show me your clean page.**

STUDENTS DO: Hold up math journals to show a clean page.

TEACHER SAY: **Write numbers 6, 7, 8, 9, and 10 in your math journal. Try to write the best numbers you have ever written! Next to your 6, draw 6 small circles. Next to your 7, draw 7 small circles. How many circles do you think you should draw next to your 8?**

STUDENTS DO: Call out: 8.

TEACHER SAY: **You should draw 8 small circles next to your 8. Draw small circles for 9 and 10, too. If you need help, raise your hand and I will come help you.**

STUDENTS DO: Write numbers 6, 7, 8, 9, and 10 in their math journals. Draw small circles to represent the matching quantities.

TEACHER DO: Walk around to monitor students' progress. When most students are done, give the remaining students a time limit to finish.

2. TEACHER SAY: **Keep your math journal out. You might want to use it because I want your help solving another problem. This time, I am going to tell you the story problem. Then, you and your Shoulder Partner are going to figure out if it is a putting together problem – addition – or a taking away problem – subtraction. You can also decide if you want to use counters or draw pictures to solve it. Are you ready?**

STUDENTS DO: Confirm they are ready.

TEACHER SAY: **I went for a walk to see how many living things I could find. On one street, I saw 3 living things – a bird, a horse, and a dog. On another street, I saw 6 living things – a bird,**

a cat, a dog, a fly, a butterfly, and another horse. How many living things did I see in all? Listen again.
I went for a walk to see how many living things I could find. On one street, I saw 3 living things. On another street, I saw 6 living things. How many living things did I see in all?
Talk to your Shoulder Partner and figure out if this is a putting together problem or a taking away problem. Explain why you think so.

STUDENTS DO: Talk to **Shoulder Partner**s about what type of problem it is.

TEACHER SAY: **Now, decide whether you want to draw pictures or use counters. Talk with your Shoulder Partner about what kind of strategy you would like to use.**

STUDENTS DO: Talk to **Shoulder Partner**s about what strategy they want to use.

TEACHER SAY: **Raise your hand if you want counters.**

STUDENTS DO: Pairs that want counters raise their hands.

TEACHER DO: Hand out counters to teams who want them.

TEACHER SAY: **I will give you a few minutes to work with your Shoulder Partner to solve the problem. Then we will talk about it together.**

STUDENTS DO: Work with their partners to solve the problem.

TEACHER DO: Walk around an listen to students' conversations. Look at the strategies they are trying. After most students are done, give the remaining students a time limit.

TEACHER SAY: **Who thinks they know the answer to the problem?**

STUDENTS DO: Raise hands if they have an answer to share.

TEACHER DO: Call on pairs to share their answers. Ask if any students have a different answer.

If any students got the wrong answer, ask them to come up and explain how they solved the problem. See if they can identify the error. Ask questions to help students think about the problem. Did they add incorrectly or did they think it was a subtraction problem? Why did they think so?

Call up a pair of students who got the correct answer. Ask them to explain how they solved the problem. How did they know that it was a putting together problem? Did they double check their work?

TEACHER SAY: **Do any of you have any questions for your colleagues?**

STUDENTS DO: Raise hands to ask questions of the students who got the answer right.

TEACHER SAY: **Since I saw 3 living things and then I saw 6 more living things, this is a putting together problem – an addition problem. Three and 6 makes 9. The correct answer is 9.**
Do not be upset or frustrated if you got the wrong answer. We are learning! And remember, when we mistakes, we learn more. If you made a mistake today, think about why you made it and how you will be careful not to make it again. That is what makes a good learner. All of you give yourselves a pat on the back!

TEACHER DO: Collect counters.

Share (5 mins)

Directions

1. **TEACHER SAY: I would like to know how you know when a problem is a putting together problem – an addition problem? How do you know when a problem is a taking away problem – a subtraction problem? Do you have any strategies that work for you? Give me a thumbs up.**

STUDENTS DO: Give a thumbs up if they have a strategy for knowing what type of problem they are doing.

TEACHER DO: Call on students with thumbs up. Listen to their strategies and be sure to correct any misconceptions. Ask questions, such as: Are you sure that will work every time? How do you know?

STUDENTS DO: Listen to their colleagues.

TEACHER SAY: The next time we do a story problem, see if you can try one of your colleagues' strategies to figure out if it is an addition or subtraction problem. Great work today!

Lesson 60 Overview

OUTCOMES	STUDENT VOCABULARY
Students will: • Participate in Calendar Math • Count objects to tell how many there are to 10 • Demonstrate understanding of the relationship between number and quantity	• No new vocabulary. Review vocabulary as needed.

LESSON PREPARATION FOR THE TEACHER

- As noted in Chapter Preparation for the Teacher, in this lesson students will celebrate counting to 10 and reaching the end of the Term by playing games and doing activities in which they practice counting and matching numbers and quantities. Make sure students have access to the games and activities you created for Day 30, as well as the tactile number writing practice cards and the hanger balance and measuring materials.
- Consider asking parent volunteers to help you manage students during this active and busy period.

MATERIALS

Calendar Math Area



Math games and activities

Calendar and Movement (10 mins)

Directions

1. **TEACHER SAY: It is Calendar time! We are going to do a shorter Calendar Math lesson and we are skipping Movement Math because today is a very special day! We are going to celebrate getting to 10 and I have some fun counting activities for you to do! Let's get started.**

TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: Everyone tell me what month it is.

STUDENTS DO: Respond together: current month.

TEACHER SAY: Say the days of the week with me.

STUDENTS DO: Say the days of the week aloud with the teacher.

TEACHER SAY: If I point to you, come up and point to today on the calendar. If you are not sure, ask a colleague for help.

TEACHER DO: Point to a student.

STUDENTS DO: Selected student points to today on the calendar or asks for help.

TEACHER SAY: Yes, this square on the calendar represents today. Today is (day) the (number date) of (month) (year). Now all of you say the date.

STUDENTS DO: Say the date together.

Learn (45 mins)

Directions

Counting Colleagues
The teacher will point to self and say, "One." The teacher will then point to a student. That student must stand and say, "Two." That student points at a colleague. That student stands and says, "Three." Students continue to stand and count until they reach 10. Then, they start counting again from 1 to 10. The game repeats until all students are standing

Catch and Count
This game is played the same as **Counting Colleagues**, but instead of pointing, the students gently toss a **ball** to their colleagues. The colleague who catches the ball stands and counts and then gently tosses the ball to the next colleague.

Cookie Jar Matching
Activity Directions:
Students place each cookie on top of the number that matches the number of chocolate chips on the cookie.

Sand Writing
Activity Directions:
Students write numbers 1-10 in sand using their fingers. They can "erase" and practice as many times as they like!

Number Puzzle
Activity Directions:
Students put the puzzle together to show the numbers in order.

Paper Clip Chains
Activity Directions:
Students create chains of paper clips to match the numbers in each section of a paper strip and attach the chains to the strip.

Superstar Number Wheel
Activity Directions:

Students attach clothespins to the circle so the number on the clothespins matches the number of stars in each segment.

Feed the Birds
Activity Directions:
Students feed cardboard "birds" the right number of "worms."

Ice Cube Tray Sorting
Activity Directions:
Students sort small dot cards into an ice cube tray by matching the number of dots on the cards to the numbers written in the tray sections.

Building Towers
Activity Directions:
Students build towers of blocks to match numbers on cards.

Roll and Cross
Activity Directions:
Students roll a large number cube and cross off the number rolled from a list of numbers 1-10. Five sides of the cube show dots up to 5. The sixth side of the cube shows numbers 6-10. Students may cross off any one of those numbers until all numbers are crossed off.

Share (5 mins)

Directions

1. TEACHER DO: If possible, ask classroom volunteers or student helpers to clean up the games and put them away during Share.

TEACHER SAY: That was fun! Which activities were your favorites? Why?

STUDENTS DO: Share their thoughts about their favorite games.

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